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THE INTVERSION OF ALBERTA

AN INQUERY INTO THE DURING STUDIES



MARILTO SWEET

A THESIS

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IN PARTIAL FULFILMENT OF THE INCOMPANYS FOR THE DEGREE

OF HESTER OF ROSEATION

DEPARTMENT OF ELEMENTARY EDUCATION

SPRING, BURERTA



THE UNIVERSITY OF ALBERTA

AN INQUIRY INTO THE INTERDISCIPLINARY APPROACH TO THE SOCIAL STUDIES



by MARILYN SHORTT

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

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SPRING, 1971

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled, "An Inquiry into the Interdisciplinary Approach to the Social Studies" submitted by Marilyn Shortt, in partial fulfilment of the requirements for the degree of Master of Education.



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Due to the diversity in the literature relating to the interdisciplinary approach to the social studies, this thesis attempted to
synthesize the main ideas of interdisciplinary theory and to indicate
the implications of the synthesis where further research appeared to be
indicated. The literature that was used as a basis for the synthesis
was selected from three major fields: social studies, curriculum
development and the social sciences.

The synthesis was organized around four themes which appeared throughout the literature. Values and Citizenship-Development represented the first theme. The Content of the Social Sciences represented the second and is central to any discussion of the interdisciplinary approach. The third theme, The "How" of the interdisciplinary approach, afforded some insights into operational applications within the classroom. The fourth and final theme discussed was The Processes of the Social Sciences, a vital component of the approach. Perspectives on the synthesis were offered in behavioral terms through the use of a process-oriented model. It was hoped that such a model might clarify two particular points: one, the concept of what constitutes an interdisciplinary concept and generalization and second, some of the processes that are inherent in translating the total universe of knowledge and processes available to a teacher into a viable interdisciplinary study.

The ideas presented in the synthesis may be summarized in the following statements:

1. The interdisciplinary approach to the social studies is an eclectic method of selecting and organizing content from two or more of the social science disciplines for simultaneous



application to a social study.

- 2. The universe of content appears to consist of:
 - a) Interdisciplinary concepts and generalizations that go beyond the structure of the disciplines.
 - b) Concepts and generalizations selected from the structures of the social science disciplines.
- 3. Due to its eclectic nature, synthesis is an outstanding feature of the approach.
- 4. The approach advocates the inclusion of more of the processes of the social science disciplines into a social study.
- 5. Specific time must be set aside for instruction in and refinement of general process skills.
- 6. Interdisciplinarians are vitally concerned with citizenship development but students must be made aware of the diversity of and competition among values within society.
- 7. Interdisciplinarians do not support indoctrination.
- 8. The approach encourages the study of problems that are of interest to students.
- 9. To achieve a comprehensive view of man, the knowledge of all the social science disciplines is required.
- 10. The interdisciplinary approach represents an intellectually rigorous and disciplined approach to the social studies.
- 11. To achieve all of these goals, the expertise of a master teacher is required.

The interdisciplinary approach to the social studies is a viable approach to education. It provides a vehicle through which a teacher may exercise professional capabilities to achieve a comprehensive view of man.



The technique suggests the potential of providing for the many needs of the child. As such, when properly understood and expertly implemented, it will register a profound impact on the educational system and perhaps most importantly upon it's precious client, the child.



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CHAPTER I

THE PROBLEM AND ITS SIGNIFICANCE

The Problem

Current thinking about organization of the social studies seems to be spread along a continuum with sharp philosophical differences separating the two extremes. One position views the social studies as basically the study of the social sciences as separate disciplines, a multidisciplinary approach. At the opposite end of the continuum, the other position supports an interdisciplinary approach to social studies. The latter point of view is well illustrated by Patrick (1966):

There is challenge, ferment, excitement, and change in the air; the social studies are out of the doldrums at last. The best of the new ideas call for inter-disciplinary studies taught in terms of structure and the discovery method (p. 36).

However, Barnes (1967) warns that the interdisciplinary approach has almost become a panacea for educational ills, despite the fact that "the exact meaning of the phrase seems to be considerably more than hazy to those interdisciplinarians who use it (p. 36)."

Even a preliminary examination of the theoretical literature supports Barnes' contention. The literature relating to the interdisciplinary approach comes from a variety of fields and contains many discrepancies. Much of the diversity in the literature results from the lack of a commonly accepted definition of the terms used. Terms such as 'unified', 'correlated', 'integrated', 'crossdisciplinary', 'multidisciplinary', are used by some writers to refer to the same construct and by other writers to refer to different ideas. This very fundamental



weakness makes the interpretation of the literature extremely difficult.

Consequently, this study attempts to reconcile some of the diverse theoretical positions. The study takes the form of a synthesis, the purpose of which is:

- 1. to isolate the main aspects of the theories relating to the interdisciplinary approach to the social studies and to compare and contrast their major propositions;
- 2. to organize these ideas into a logical framework; and
- 3. to state the theory in behavioral terms indicating some of the implications for research and education.

Definition of Terms

- Social Studies The term social studies designates that portion of the curriculum which deals specifically with man in relation to his physical and social environments. (California State Department of Education Bulletin, 1957, p. 9).
- Social Sciences The social sciences is defined as the academic disciplines, history, geography, political science, economics, social psychology, anthropology, and sociology.
- Concept A concept may be defined as an abstraction that applies to a class or group of objects or activities that have certain qualities in common (Michaelis, 1968, p. 15).
- Generalization A generalization may be viewed as a statement of a relationship between two or more concepts which has broad applicability (Douglass, 1967, p. 112).
- Multidisciplinary approach The study of the social sciences, as separate disciplines, that aims to familiarize the pupil with the basic concepts of the disciplines and with the methods of inquiry and



modes of thought of the scholars in those disciplines (Jarolimek, 1967, p. 7).

- Synthesis The combining of the constituent elements of separate material or abstract entities into a single or unified entity (Random House Dictionary, 1968, p. 1334).
- Interdisciplinary concept A concept that has been selected as representing one of the major concepts in the structure of two or more
 disciplines. Example: culture has been selected as a major concept in the disciplines of anthropology and sociology,
 and/or
 a concept that cuts across the social sciences,
 and/or
 an overarching concept.
- Integration Making whole or complete by adding or bringing together parts (Webster's New World Dictionary of the American Language, 1966, p. 759).
- A social study A social study may be defined as having three basic components. First, the formal object of its study is Man. Second, it is an investigation, a research, an inquiry made by children in interaction with a teacher. Third, this investigation into man implies a vast network of relationships between man and his world, and should result in the continuous evaluation by the child of his attitudes, values and behavior (Wilson, April, 1970).

The Significance of the Study

The writer supports the position of McMurrin that

There is no absolutely best way of teaching a subject, or best textbook, or best anyting in education....the whole matter must be kept



open and viable. There is great value in diversity..... The problems of education will never be finally solved, and the pursuit of better ways of teaching and more valuable things to teach must never end (Heath, 1964, p. 278).

Educators are becoming increasingly aware that different children learn in different ways. This concept underlies the momentum propelling one towards increased emphasis on individualized instruction. If a teacher is to pay more than 'lip service' to the idea of individualized instruction, then that teacher must have, at his disposal, a "portfolio of different intellectual techniques together with a system for deciding when each ought to be used (Parker and Rubin, 1966, p. 18)." The availability of a variety of techniques probably will yield the highest returns in learning (Metcalfe, 1963).

However, in a penetrating study concerning the state of education in Canada, the Ontario Institute for Studies in Education (1968) related that three quarters of all classes they observed were being taught by one of two closely related methods, the lecture and/or the assignment method (p. 44 - 45).

If "freedom to teach depends upon being informed about the options open to you (Douglass, 1967, p. 69)," then one might conclude that the teachers under investigation by the Ontario Institute did not have sufficient options open to them.

At least one reason appears to account for this lack.

There is a large amount of lag between theory and practice in the teaching of social studies in the elementary school.....the extent of the discrepancy....is sufficient to be described as serious (Herman, 1969, p. 253).

This lag between theory and practice is not so surprising when one considers the lack of a common language eluded to in the statement of the



"the methods, categories, criteria, language, and conclusions of the social studies have not been established (p. 12)."

Massialas and Smith (1965) have said that "our research should contribute to the building of a systematic body of social studies theory (p. 237)." The purpose of this approach is to classify and systematize accurately social studies knowledge. This thesis represents one small step in this direction.

The Procedure

The procedure used in this investigation is synthesis. The writings of a representative number of writers from three fields are presented: social studies, curriculum development and the social sciences. The authors chosen for discussion are selected on the basis of the following criteria:

- 1. The reputation of the author within his or her field,
- 2. the unique contribution made by the author to the development of the theory,
- 3. the clarity with which the author presented the theory. Because the volume of material written on the topic is vast, the major authors selected are chosen on the criteria listed above. However, in order to achieve as representative a sample of theory as possible, the work of other authors is introduced in a comparative and contrasting manner in relation to the major author. The potential that an author's work provided to utilize this comparing and contrasting technique, therefore, represents the fourth criterion.

It is assumed that the writings of the major authors are indeed representative of the literature of their field.



The procedure of the study can be further clarified by a statement of what it is not. The study is not concerned with the point and counterpoint of the interdisciplinary-multidisciplinary argument. This does not, however, preclude the use of this dialogue in order to bring a sharper focus to bear on the problem of the research.

The research is not concerned with an analysis of the philosophies of particular individuals. The ideas of particular writers such as Hanna, Fenton, King and Brownell, for example, are utilized only in so far as they are relevant to the research.

The literature, therefore, is reviewed in Chapters II and III.

In Chapter IV a synthesis is developed around four themes. The particular contributions of the writers relative to each theme is discussed.

Following a discussion of the themes, an attempt is made in Chapter V to refine the main points of the interdisciplinary theory.

The synthesis is used in Chapter VI as a basis for a discussion of the educational implications of the study and for indicating particular areas of future research.



CHAPTER II

THEORIES RELATING TO THE INTERDISCIPLINARY APPROACH

The method attempted in this thesis is synthesis. But before the synthesis is presented, it is felt that a discussion of the literature is necessary. The discussion in this chapter and in Chapter III of the theories of a representative number of writers serves as a basis for the synthesis which follows in Chapter IV. These writers are selected on the basis of the clarity with which they presented the interdisciplinary theory. Many of the ideas presented briefly in the following two chapters will be discussed more comprehensively in relation to the other topics in the following chapters.

The theorists selected for discussion represent three areas of endeavor: social studies, the social sciences, and curriculum development. Because a great deal has been written about the interdisciplinary approach by social studies theorists, this material is developed in a separate chapter, Chapter II. Chapter III discusses the literature from the other two areas. Review of the literature, then, is begun with consideration of the theory from the field of social studies. Certain questions were initiated. To obtain answers to these questions theory from the social sciences and curriculum development is required. This is the rationale for presenting the literature in the order discussed above.

It is recognized that the boundaries of these three fields, social studies, the social sciences and curriculum development are indeed flexible, that some writers could conceivably fit into one or more of the categories. For example, the theory of Taba is included in the field of curriculum development. This is not to deny Taba's substantial contribution



to social studies literature. However, the context of Taba's theory cited here reflects curriculum development and is the rationale for placing Taba's work in that category.

The discussion of each theory is based on the definitions used by the writer, the rationale he uses to support his theory, and the major contributions that the theorist makes to clarifying the interdisciplinary approach.

Social Studies

The social studies literature reflects a diversity of opinion relating to many aspects of the interdisciplinary theory. The writings of several authors are examined in detail. However, it would be impossible to extend this coverage to every author. Consequently, the theory presented by some writers notably, Preston, Massialas, Ratcliffe, Oliver and others is indicated in a comparative and contrasting manner in relation to the authors selected for detailed examination.

Examination of the social studies literature is begun with consideration of the work of Tucker. Tucker's work (1968) represents a recent treatment of the thesis topic. To avoid needless repetition, the review of the literature is developed by presenting particular aspects of the theory emphasized by the author under consideration. The review contained in Chapter II concludes with the work of Womack who attempts to operationalize the interdisciplinary theory and whose work is considered in following chapters related to different topics.

Tucker. Tucker, in a doctoral dissertation, did an analysis of the "new" social studies literature. One of the problems discussed briefly by Tucker is the point and counter point of the interdisciplinary, multidisciplinary



or intra-disciplinary argument which consumes much of the passion, interest, and energy of social studies educators. Inter-disciplinarians distrust the Intra-Disciplinarians' assumption that the combining of all the disciplines will add up to a "unifying or wholistic picture of a fragmented environment - an important goal in an increasingly disconnected world (Tucker, 1968, p. 90)." Here Tucker isolates one essential characteristic of the rationale for an inter-disciplinary approach. Inter-disciplinarians are vitally concerned with presenting a total or comprehensive picture.

Neither do the inter-disciplinarians find great solace in the efforts of the multi-disciplinarian. The disciplines are the epitome of fragmentation and have been reified and institutionalized to the point where educators have difficulty seeing or thinking beyond them (Wise, 1966). "Neither the specialization of the disciplines nor their hybrids will present the possibility for wholism (Brady, 1967, p. 601)." Tucker, quoting Cooke concludes, therefore, that,

the social studies must incorporate forms of instruction that transcend the scope and purpose of the social science disciplines..... the inherent insufficiency of history as a discipline also applies to the other social science disciplines (Cooke, 1963, p. 418).

Inter-disciplinarians propose a pattern of organization for the social studies which although drawn from the social science disciplines, does not purport to preserve the discipline boundaries. It is the common, universal elements among these disciplines that are important. Tucker continues that the social science disciplines are viewed as a common and unified entity impelling social studies educators toward the production of generalizations, concepts, and processes which are not



circumscribed by any single discipline.

"An important selective criterion is the more disciplines that are related to a concept, the more useful the concept is for the social studies (Tucker, 1968, p. 35)." Price, Smith and Hickman (1965) put this latter statement into somewhat clearer perspective. "The greater number of disciplines using a concept or a generalization, the better for the inter-disciplinary transcendent purposes of the social studies (p. 39)." These concepts and generalizations

serve for the selection and organization of content when this content, in the classroom, leads back toward their comprehension by the student. That is to say, the concepts and generalizations are considered the beginning of organization and the end of instruction (Tucker, 1968, p. 35).

Tucker's criticism of the inter-disciplinary approach is centered around two ideas: the contention that inter-disciplinary concepts and generalizations are so abstract that it is difficult to view what they mean in regard to specific directions in social studies education and the concern for values. Taba supports this first criticism by referring to the California State Program's list of inter-disciplinary generalizations (1964). She claims that many of these generalizations are so vague as to be meaningless. Tucker's further criticisms suggest several pertinent questions:

- 1. How are inter-disciplinary concepts and generalizations to be linked to the broader purposes of social studies education?
- 2. How are they to be translated into desirable classroom practice?

With regard to the second criticism, Tucker discusses the concern demonstrated by the Syracuse Project (1964) about the lack of a clearly



defined and agreed upon societal value structure and also by the conflict between values taught in school and those which they observe in practice in home, school and community (Price, Smith and Hickman, 1965). One of the purposes of social studies education is to deal with values but Tucker poses two questions:

How are these purposes of social studies education to be achieved with the use of overarching social science concepts? In what way do interdisciplinary social science concepts relate to values (Tucker, 1968, pp. 91, 93)?

Engle (1965) voices the same concern. "What beliefs are to be taught (beliefs concerning values are an especially difficult problem here) and on whose authority (pp. 12 - 13)?"

Content organized on an interdisciplinary basis cannot move beyond itself unless certain additional problems are resolved such as its relationship to value problems, to the encouraging of certain inquiry skills, or to specific course organization (Tucker, 1968, p. 92).

Tucker concludes that

the inter-disciplinary approach provides an opening through which all social scientists may, if they so choose, take part in meeting the challenge of the twentieth century, many social scientists and social studies educators will want to know to what end (Price, Smith and Hickman, 1965, p. 38)?

Jarolimek. The writings of Jarolimek indicate an evolutionary development in his thinking. According to Jarolimek, the terms fused and unified are applied to social studies programs of the interdisciplinary type (1967A, p. 3). This appears to be so as Jarolimek (1959) used these terms to refer to a trend toward unified or integrated courses due to their added realistic approach to the understanding of current complex problems. He defines the interdisciplinary approach as a "fusion of



subject matter from two or more fields of knowledge into a single, unified program of social studies (1959, pp. 2 - 3)." This definition is almost too broad to be useful but implicit within the term "unified" Jarolimek seems to be suggesting a certain type of cohesion and interrelationship of diverse fields of knowledge. Later, in the same volume, he attempts a somewhat more precise definition of the term, e.g. "the fusion of elements from the various <u>social sciences</u> into a single, broad program."

Refering to the interdisciplinary - multidisciplinary controversy Jarolimek states that both theory and practice favor the unified approach at the elementary level. He viewed the trend towards a unified approach as a movement away from the learning of tedious bits of unrelated information, of extending and deepening students' understanding through interesting and challenging opportunities for learning. How this is to be accomplished is really not specified but he does point to the appearance of a text book called a 'unified social studies text'. In some cases the materials are exceptionally well prepared and the use of them would almost ensure a measure of unification. While not advising the exclusive use of a single textbook the availability of unified materials is seen as a supportive one (1959).

Jarolimek touches briefly upon one very important aspect of a unified social studies program, teaching the child how to organize ideas. Each of the social sciences has its own system or systems of organization. For example, history may be organized around movements, periods, chronology, etc. Geography may be studied according to physical factors, regions, areas. When elements are selected from several social sciences and fused into a single study, problems of organization become complex indeed.



Sometimes teachers find it difficult to teach a fused program. A historical pattern of organization may be imposed upon a program which contains elements of geography, sociology or economics (1959, pp. 219 - 221). Here Jarolimek illustrates a most necessary requirement. "The teacher himself" must have "a clear understanding of the logical arrangement of the material at hand. He will then be able to teach youngsters how to organize it for better understanding (1959, p. 221)." What is implicit in this is that a teacher must have explicit and comprehensive knowledge of two things:

- 1. the structure of the social science disciplines
- 2. knowledge of their processes and organizational patterns.

 Senesh (1966) suggests relatively the same idea when he states that the structure of the social sciences is a pedagogical device which "I recommend that teacher training institutions engrave on the mental screen of the teachers (p. 46)."

In 1965 Jarolimek continued to support the unified approach.

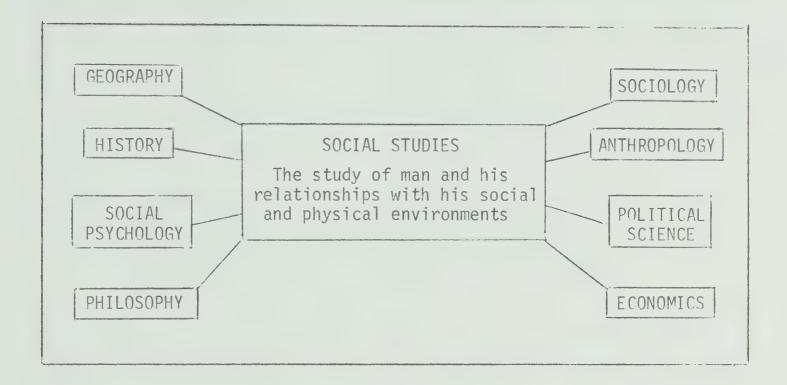
"While satisfactory explanations of the past are dependent upon all those subjects (the social science disciplines) it is even more necessary to call upon them for an understanding of the present (p. 8)." The new dimension is relevancy. Unified social studies must contribute to a child's understanding of the present. It must be relevant to his needs.

The 1967 edition of, <u>Social Studies in Elementary Education</u> establishes the rationale that the interdisciplinary approach is "consistent with the well-established practice of moving from the general to the particular - from gaining a general background of information before becoming a specialist (p. 3)." Jarolimek presents the following diagram. Another piece of theory evolves. "In some cases a single



FIGURE I

SOCIAL STUDIES CONTENT INCLUDES BASIC CONCEPTS FROM MANY OF THE SOCIAL SCIENCES



discipline might occupy the position of central importance but would draw upon the other related disciplines for concepts to illuminate the topic (1967, B. p. 4)."

Jarolimek (1967) gives evidence of a shift in theoretical positions regarding the interdisciplinary or multidisciplinary dilemma. "Experience has shown that good instruction can result under either a separate subject or a unified arrangement (p. 5)." Others support this position. What is more important than the organizational structure is the quality of the learning experiences the pupils are having (Drummond, 1963).



Johnson. Johnson, while disagreeing theoretically with Tucker's thesis, allies himself rather closely to Jarolimek's (1967) latest position on interdisciplinary social studies. Unlike Jarolimek, who used the term unified and fused for interdisciplinary, Johnson uses the term "general education". He defines general education thus: "it is for all and is to be found wherever there is an 'explosive mixture of ideas' drawn from the various social science disciplines (1956, p. 101)." Johnson objects to Keller's and Berelson's (1962) attempt to limit the social studies "to a study of separate subjects and an acquiring of facts (Keller, 1961, p. 60)." Rather Johnson calls attention to the

obvious necessity for the citizen to live and make decisions (judgments about values) in a "life space" or "area of experience" which goes far beyond and cuts across the discrete boundaries of the classical conception of the social sciences (Engle, 1963, p. 10).

Johnson's writings (1956; 1958; 1963) are sometimes rather broad thus hindering interpretation. For example, he discusses the substitution of "a conceptual for a perceptual order and thus, by giving the student skill in generalizing, help him become the 'lord of nature' including his own (1956, p. 102)." Nevertheless, he does make certain invaluable contributions to interdisciplinary theory.

For Johnson (1956) general education in the social sciences has a double focus. "An understanding of related subject matters and an understanding of the method by which their interrelations may be established (p. 103)." What Johnson is saying is that emphasis must be not only in the interrelations of the social science disciplines, but attention must be given to their vital <u>processes</u>. Here Johnson touches on a matter of concern to the opponents of the interdisciplinary approach (Ex. Fenton, 1967; Scriven, 1964). The failure, as they view it, of the



interdisciplinarians to deal with the processes of the various social science disciplines. Johnson (1956) recognizes this aspect as a very significant element in the education of students. "They must be skilled in order to be civilized (p. 103)."

Johnson along with Hanna (1963) and Metcalfe (1963) sees the social studies as concerned focally with citizenship education. In his proposed program Johnson indicates that its major focus is <a href="https://www.human.com/huma

a sharpened and informed awareness not only of the nature of human values but their central and dominant place in individual and group life. It also tells of their infinite number and variety, their similarities, and their dissimilarities. It schools us on principles by which we may guide our conduct for the swift and certain changes of our time so that we are not lost in them (1958, p. 240).

The interdisciplinary approach to social studies must concern itself with values but not in an indoctrinarian manner. Engle (1965) claims Johnson "would be uncomfortable bedfellows with a group which sees the role of the social studies as indoctrination (p. 13)."

Johnson, while agreeing with Wallas' thinking regarding the inherent dangers of unrelated specialisms in the social sciences, qualifies his position somewhat. There are "sixty-and-nine ways to unite tribal lays" (Kipling), and every one of them is right. "So it is with patterns and programs of general education in the social sciences (1958, p. 239)."

Fenton. Fenton allies himself with the critics of the interdisciplinary approach to social studies (Ex. Tucker, 1968; Michael Scrivens, 1964) agreeing in principle with their rationale. Unlike Joyce (1965) and Jarolimek (1967), who see potential for using either a multidisciplinary or an interdisciplinary approach as the particular teaching situation



suggests, Fenton remains a staunch critic of the approach. Nor does

Fenton share Miller's concern for the pressure the social science

specialists appear to be bringing to bear upon the elementary social

studies instruction. Some "social scientists no longer want any fusion,
but separate courses in their own disciplines (Miller, 1964, p. 194)."

Although Fenton does not discuss the interdisciplinary approach at great length, his criticisms present a challenging perspective of the approach and are worthy of consideration. His criticism is centered around the work of Hanna and his associates (1962; 1963a; 1963b) and the California State Department of Education (1959) two notable contributors to interdisciplinary generalizations.

The Stanford group identified some 3272 generalizations from the social sciences as a guide to selection of content in the social studies. These generalizations were then classified into "nine basic activities of man (Hanna and Lee, 1962; Hanna, 1963)."

I find the entire system shallow and of dubious utility. There are too many generalizations to learn - one-and-a-half every school day for twelve years. Moreover, some of the basic activities aren't basic (Fenton, 1967a, p. 52).

Fenton is vitally concerned about the utility of overarching generalizations. He focuses briefly on this aspect of the interdisciplinary approach.

Lists of generalizations are inert. They become ends in themselves, tempting teachers to choose generalizations from a list, Smorgasbord fashion, for their students, rather than means to an end (Fenton, 1967b, p. 13).

What Fenton seems to be questioning is the criteria a teacher would use in selecting such generalizations and having selected the generalizations what strategy would be employed to enable students to discover them?



Are these generalizations to be committed to memory like sterile facts and if so, what possible utility would they be to students?

Fenton's criticism of the California State Department of Education (1959) claims that it provides a discursive and confusing framework for the social studies. The work of Hanna and the California State Department of Education have had a great deal of exposure and Fenton feels that as a result most teachers probably equate the structure of the social studies with lists of generalizations. Fenton faults their conception of the social sciences. The social sciences have become for them primarily a body of known generalizations rather than a process of inquiry.

Process is important. In the midst of a knowledge explosion, each of us must either know how to build new generalizations or be content to live in tomorrow's world with yesterday's knowledge (Fenton, 1968, p 77).

Fenton, therefore, makes the assumption that the use of interdisciplinary generalizations, which cut across the various social sciences, does not provide an adequate framework for attention to the processes employed by these disciplines.

<u>Joyce</u>. Joyce (1969) shares the beliefs held by some social scientists that the disciplines - economics, anthropology, history and so on - should be taught in such a way as to preserve the integrity of each. This is often taken to mean that there have to be separate courses for each of the disciplines. Joyce feels that the social sciences have much "content in common" and a curriculum can be organized which emphasizes the unique concepts of each of them without the establishment of separate courses. This idea of "content in common" which interdisciplinarians attempt to feret out is sometimes difficult to understand. Some interdisciplinarians use the term, concepts and generalizations that "cut across" the disciplines;



others use the term "over arching". A somewhat clearer understanding of these terms is attempted in the following:

Because all social science disciplines focus on man, many concepts and generalizations, like a musical theme, recur in all the disciplines (Dunfee and Sagl, 1966, p. 18).

It is these recurring themes when extracted and synthesized that form the basis of interdisciplinary concepts and generalizations. Joyce shares Fenton's concern for the process of the individual disciplines but isolates one additional problem, that is:

to provide a strategy for selecting content which will enable us to bring to the child the potency of the several social sciences but which will not, at the same time, be over-balanced in the direction of a single one of the disciplines (Joyce, 1965, p. 68).

This concern for balance is a real one that every teacher should give consideration to whatever the pattern of organization selected.

Joyce, unlike Fenton, views the work of Hanna as having the potential to provide continuity and sequence. He feels that instead of a familiar study of a nation, a community or a political process children may be persuaded to pursue an interdisciplinary study that could concentrate on decision areas of group life, career decisions, decisions about collective responsibility and the like (Joyce, 1965, p. 76). However, Joyce warns as does Schwab (1964) that concepts and generalizations "are subject to possible revision or abandonment as better ideas are developed (Joyce, 1967, p. 20)." What is implicit in Joyce's remarks is that although a teacher may use these concepts and generalizations with a certain assurance of their reliability, their <u>dynamic</u> nature must be keptin mind. This idea has implications for those who would use an interdisciplinary approach. However, an interdisciplinarian would argue that,



for example, a generalization reached at the psychological level of analysis and at the sociological level of analysis and subsequently chosen by an interdisciplinarian as being a "common" generalization e.g. cutting across at least these two disciplines, would indeed have an added advantage. "In fact, the question of whether or not they mesh constitutes one test of their validity (Sherif and Sherif, 1969, preface p.x)." This idea will be discussed at greater length in another context in following chapters.

Gail and Charton. The 7th Atlantic Study Conference on Education organized by the Atlantic Information Center for Teachers at the Centro Europeo dell' Educazione, Villa Falconieri, Frascati, Italy in 1968 published a report consisting of working papers of educators of international repute. One of the collaborative efforts was a paper entitled, The Pedagogic and Educational Value of Interdisciplinary Studies, by Gail (Germany) and Charton (France).

Gail and Charton (1968) felt that the first task was to establish whether there was a fundamental distinction or a conflict of situations between "the traditional authoritarian teaching method and the new methods of participation and exploration often involved by means of interdisciplinary studies (p. 55)." It is important to note their terms of reference, participation and exploration in reference to interdisciplinary study. They define unidisciplinary forms of teaching as "those involving a single subject matter as determined by its aims, concepts and methods (1968, p. 55)."

Interdisciplinary forms of teaching are those involving several disciplines in a joint effort to recreate the complexity of real situations within the educational structure (Gail and Charton, 1968, p. 55).



Gail and Charton, as does Kitzinger, (1968) obviously view interdisciplinary approaches to teaching as a means to introduce relevancy and reality into the curriculum. They use the term cross-disciplinary synonymously with interdisciplinary. Cross-disciplinary studies can stimulate the pupils' curiosity and sensitivity and create fuller understanding of specific problems through a broader base of analysis and direct experience. The cross-disciplinary method is viewed by Gail and Charton as stimulating, open-ended and lively using audio-visual aids to advantage. It invites and inspires dialogue, debate and even protest. In other words, participation in the fullest sense of the word. That Gail and Charton are enthusiastic about the approach does not mean that they do not recognize its inherent dangers.

The authors agree with Spindler (1958) that the interdisciplinary approach faces the risk of a generalized approach; of approaching topics "with one blow" without separating constitutent elements, and on the other hand that of fragmented teaching without continuity.

Schutze and Wilcox (1968) and Roose (1968) are aware of these limitations. They feel that the interdisciplinary approach must be backed up by a framework of previously acquired knowledge obtained by conventional methods. This point of view approaches that of Joyce (1965) and Komarovsky (1957).

Gail and Charton (1968) conclude that there is no opposition within any effective educational system between the unidisciplinary and the interdisciplinary method. Both have merit and can be applied side by side.

Both methods have their place, their value. The value of conventional methods has been proved while interdisciplinary programmes are at the experimental stage (p. 57).



Kitzinger (1968) agrees with this statement, "the interdisciplinary approach is seen by many as potentially one of the best ways of teaching about large concepts.....(p. 5)."

Michaelis. Michaelis' theory on the interdisciplinary approach to social studies is not as detailed as that of some other theorists, nevertheless, he does make valuable contributions to the development of the theory. Michaelis uses the terms unified and interdisciplinary synonymously. He defines the interdisciplinary approach as being one "in which the disciplines are indistinguishable.....content is.....brought together into a mix or amalgum which renders the disciplines indistinguishable (Michaelis, 1968, p. 136)." Another perspective is given on the nature of this "mix".

The blending may be extreme, wherein the ingredients of the blend (geography, history, economics, etc.) are almost impossible to identify, or the blend may be quite moderate, with only rather obvious and natural relationships between the social sciences being developed (Preston, 1968, p. 45).

Michaelis says that the interdisciplinary approach is usually found in the early grades but may also be found in courses in the secondary school that deal with contemporary problems that require materials drawn from several disciplines. Thus, Michaelis indicates at least one criterion which could induce a teacher to use an interdisciplinary approach: an interdisciplinary approach could be used at various levels depending on the apparent need to fuse or relate material from several disciplines to the topic under study.

In short, a pattern of organization should be designed to support the attainment of objectives.....when relationships are being stressed, there is good reason to use unifiedapproaches (Michaelis, 1968, p. 137).



What Michaelis seems to be saying is that a priori decisions made to adopt a particular pattern of organization should not come first. Rather, at the planning stage the teacher would ideally choose whatever pattern of organization that seems most appropriate to the particular study under consideration. In short, the problem should not be selected to fit a particular pattern of organization, perhaps representative of the teacher's bias. Rather, the nature of the problem dictates the organizational pattern.

Michaelis, therefore, agrees with Logan and Remmington (1969)
Ratcliffe and Lee (1970) that the expansion of knowledge of recent times as well as an increasingly global attitude on the part of educators suggest multiple patterns of organization of content, one of which is the interdisciplinary approach to Social Studies.

Scriven and Skeel. The work of Skeel (1970) is included with that of Scriven (1964) because Skeel uses Scriven's theoretical position for the basis of her treatment of the interdisciplinary approach to social studies. Actually, the model which Skeel presents represents quite simply an artistic expansion of Scriven's model.

Scriven (1964) writes that the interdisciplinary approach "views the social sciences as specializations of a common subject matter. One thinks of social science as a substantial subject that proliferates like the branches of a tree (p. 89)." He continues that the multi-disciplinary position sees the social sciences as independent sciences concerned with aspects of human behavior which are related only by the fact that the behavior is performed by the same organism. Thus the social sciences are not part of a single tree but are a number of independently rooted trees that happen to grow in the earth, the study of human behavior.





Fig. 2 Representation of the interdisciplinary approach. Each of the disciplines is related to the others through the common core of human behavior.

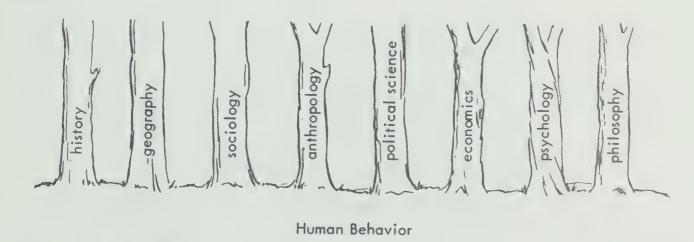


Fig. 3 Representation of the multidisciplinary approach.

(Excerpted from Skeel, 1970, p. 78-79)



Scriven feels that the whole interdisciplinary approach is mistaken. He disagrees with Presno and Presno (1967) that "social science disciplines have some common elements whatever their unique qualities and differences (p. ix)." Scriven feels that attempts to produce that common core always result in absurdly vague and worthless generalizations about human behavior. It is much more valuable to begin by giving students something substantial under the various disciplines and later feed them the relationships of the various subjects.

Scriven feels that the "notion of an ultimate synthesis of the social sciences is a dangerous myth, and an educationally vacuous myth at the moment (Scriven, Feigl and Senesh, 1967, p. 149)." Scriven says there could be an ideal setting in which we could do this but right now that is not true. He agrees with Senesh that we should not try to blend the social sciences until we know a good deal more than we do at the moment.

Engle. Engle (1965) claims that the interdisciplinarian considers,

the social studies a discipline in its own right, intermingling knowledge from all of the social science disciplines and dealing directly with social ideas and problems. Citizenship development is approached through a unification of the content of the social sciences and most importantly interdisciplinarians bring this content to bear very directly on the broad social problems of society (p. 1).

Multidisciplinarians such as Keller and Berelson disagree. The social studies is a "federation of subjects often merged in an inexact and confusing way (Keller, 1961, p. 60 - 61)." Keller says that too many social studies teachers have sacrificed the content and discipline of their subject due to their emphasis on the creation of good citizens. Berelson echoes Keller's position:



The scholars will accept preparation for responsible citizenship as the goal only if they can dictate the means, which is the presentation of each subject, for its own intellectual sake ...this is the best preparation for responsible citizenship (Berelson, 1962, p. 6).

This difference of opinion regarding the status of social studies is important and will be discussed in a later chapter. Citizenship education, process skills continue to be the subject of debate between the two contending factions. Engle believes that the quality of beliefs which people hold in the broad areas of life experience is possible only through direct experience in examining one's beliefs systematically and comprehensively.

More important,....the methodology through which one seeks synthesis and balance in his beliefs cannot be derived by adding together the separate methodologies of the several social sciences, rather it has an integrity of its own and operates under rules and procedures that distinguish it from the methodology used in any of the social sciences requiring intellectual veracity of an exceedingly high order and perfectable only through practice (Massialas and Smith, 1965, p. 12).

How this is to be accomplished is more clearly specified when Engle says that "Problem solving emphasizes the function of synthesis and imagination as ideas from a variety of related sources are tested in the context of broad areas of social experience (Engle, 1965, p. 16)." The aim implied here would be not only to continually develop and refine the ability to solve problems but also to arrive at valid answers to the perplexing circumstances which confront citizens.

Engle shares the concern of Drummond (1965) and others for the individuality of each student and the need for students to develop comprehensive understanding when confronted with any problem or topic (Chatterton, 1969).



Engle (1963) developed a program based on nine basic ideas which correspond roughly to the principal areas of persistent social problems. He does not make it clear, however, how this grid of basic activities is to be worked into the social studies program at the level of grades, subjects and topics.

Engle's contribution to the interdisciplinary approach to social studies is considerable. Not only has he developed a program but he has isolated the importance interdisciplinarians place on a problem-solving method to attain their goals one of which is influencing and improving the quality of people's beliefs as matter of fact and of value as these beliefs relate to broad and important areas of life.

<u>Hanna</u>. The work of Hanna and his associates at Stanford University has had a profound effect on the social studies in general and on the interdisciplinary approach in particular. He supports a unified, coordinated, wholistic study of content particularly in the elementary school.

We believe the child is psychologically helped, when we start his systematic school study of men in groups by having him observe and generalize about total cultural patterns rather than concentrate on the separate social science threads pulled out of the cultural textile as is done by scholars engaged in sophisticated and detailed analysis (1963, pp. 191 - 192).

Hanna supports his view by citing the work of Bruner, Galanter, Hebb, Miller and Pribriam who point out the basic relation of plans, structure, and organizations to effective learning. This does not mean that Hanna would reject or neglect in the elementary school social studies the content and processes as isolated and structured by the social scientist or historian. He believes that we have failed to infuse enough of the nutrients of the social sciences and history into the program.



Engle, who identified Hanna as an interdisciplinarian, credits Hanna as being instrumental in identifying more than 3000 generalized statements universally applicable and relevant to all times or to a stated time about man engaging in a basic human activity. These statements were assigned to nine areas of human living which "cut across the several social sciences and each of which corresponds roughly to an area in which persistent social problems may be found (Engle, 1965, p. 9)."

Hanna's (1963) concern was not only for the content and processes of the social sciences but "our accomplishments in scope and sequence of a coordinated social studies program from kindergarten through Grade twelve are meager (p. 190). An overview of Hanna's work indicates these concerns. The scope of Hanna's design for organizing generalizations is based on major human activities; the sequence is based on the expanding communities of man; and finally, the restructuring and restating the generalizations in terms of their meaning for the expanding communities of men that constitute the sequence of the design (Hanna and Lee, 1962, pp. 62 - 89).

As noted previously, Engle, Fenton and others have criticized Hanna's generalizations but Hanna points out that generalizations are helpful in avoiding a patchwork of unrelated information as well as serving as organizing centers to which specific facts and information can be related. Hanna (1962) concludes that "individuals do not remember all the information to which they are exposed, but they do tend to remember generalizations which they have derived for themselves (p. 88)." One notable feature apparently contained in this thought is that the student should be the active inquirer in the discovering of a generalization.



This places a somewhat different role on the teacher who uses an interdisciplinary approach to social studies.

Momack. Womack, the last of the writers to be discussed in this section, offers the most operational treatment of the interdisciplinary approach to social studies. Womack (1966) defines the interdisciplinary approach quite simply. "An interdisciplinary approach refers to the concurrent use of two or more social science disciplines to study the same content (p. 47)." What is interesting about this definition and the subsequent tone of Womack's work is his use of the word "content". Content to Womack is not restricted to social science generalizations, one of Fenton's criticisms of the interdisciplinary approach. "The scheme's principal fault lies in its conception of the social sciences: they become primarily a body of known generalizations (Fenton, 1967, a. p. 52)." There is room in Womack's interpretation for the use of social science concepts. According to Fenton, lists of concepts form a more useful notion of structure than lists of generalizations (1967, b).

Womack appears to be aware of the criticisms levelled at the interdisciplinary approach to social studies regarding skills development.

An integral part of the interdisciplinary approach is the skills and techniques of the social sciences. Skills and techniques are not to be left to haphazard chance but are to be specifically identified and taught in each unit of study (Womach, 1966, p. 52).

Womack realizes that the social sciences share common skills and techniques, nevertheless, each has its own particular version of skills, techniques, and ways of knowing which make it unique in its approach to content.

In his concern for skill development, the author introduces the reader to the methodological generalization which is a "principle or a



rule which describes a skill or technique for studying social studies content (Womack, 1966, p. 4)." An example of a methodological generalization could be:

any adequate comparison of political systems demand the establishment of multiple criteria.

Womack asserts that these methodological generalizations are very important in the interdisciplinary approach and are to be taught as an integral part of skill development and should not be left to chance.

Womack also shares the concern of some educators regarding content in the social studies. For too long students have studied social studies content from the perspectives of two disciplines, history and geography. Herman (1969) certainly substantiates this claim in his research. "Where are the other social sciences and the vitality and comprehensiveness which they would add to our field (Womack, 1966, p. 48)?" The two most outstanding assets of the interdisciplinary approach according to Womack are:

- 1. its value for developing the ability of students to understand and use the great and unavoidable interrelationship of all the social sciences in grasping a comprehensive picture of a single body of content, and
- 2. its value for providing students with opportunities to develop the ability to make sophisticated use of the skills and techniques of the social science disciplines (Womack, 1966).

The work of Womack supports his thesis that the aims of instruction in the social studies should be discovery by the student of the principles and generalizations of the field, rather than the traditional coverage and mastery of unrelated content.



Summary

This chapter, along with Chapter III, was intended to provide a frame of reference for the synthesis to follow. This chapter was composed of the description of thirteen social studies theorists while the theory of many other social studies writers was introduced in a comparative and contrasting manner to the major theorists.

Tucker, Fenton and Scriven presented interesting theories as critics of the interdisciplinary approach to social studies. The work of Skeel was included with that of Scriven because she bases her description of the interdisciplinary approach on the work of Scriven.

Johnson, Engle, Hanna and Womack presented the rationale for the interdisciplinary approach to social studies. Womack's contribution is notable because of its operational value.

Jarolimek, Joyce, Michaelis, Gail and Charton support the belief that multiple patterns of organization should be considered for social studies instruction.



CHAPTER III

THEORIES RELATING TO THE INTERDISCIPLINARY APPROACH

The review of the literature from the field of social studies suggests several questions. For example, given the diversity of theoretical positions regarding the interdisciplinary approach to the social studies, how would writers concerned with translating theory into practice deal with such diversity? Would consideration of their speculations regarding the possibility of implementing such an approach serve to clarify the interdisciplinary approach? Further, throughout the social studies literature, the question of how social scientists view the entire question of interdisciplinary relationships within their disciplines continually presented itself. Consequently, further clarification is sought regarding these issues and others by studying the theories of representative writers from the fields of curriculum development and the social sciences.

Curriculum Development

The theory presented here from the field of curriculum development begins with the work of Bellack because consideration of this writer's work affords the opportunity, however brief, of viewing some of the developmental aspects leading up to the interdisciplinary approach. The writings of Phenix underscores much of what follows in the work of other writers in this section. King and Brownell discuss in point form varying aspects of the theory of the research while Parker and Rubin submit a model of interdisciplinary learning worthy of discussion. The review of curriculum development theory concludes with the work of Taba.



Bellack. Considering the curriculum reform movement of the early sixtees Bellack (1964) states that most of the debate revolved around the familiar question of "what shall the schools teach?" The schools are uniquely equipped to introduce students to the fields of organized inquiry. But the school must also serve a variety of objectives created by society and the culture. Convinced that the traditionalists were not preparing students to face increasingly complex problems of their society, the progressive reformers of the 1930's and 1940's introduced a curriculum revolving around the personal and social problems of students and drawing on the academic disciplines as these became necessary to the problems under study (Bellack, 1964; Washburne, 1962).

Contemporary efforts to redefine the role of knowledge in the curriculum place emphasis on the logical order inherent in knowledge and on the structure of the disciplines. Several claims are made for teaching structure. The first is that understanding "of fundamental ideas appears to be the main road to adequate transfer of training (Bruner, 1960, p. 25)." Bruner (1962) contends that "the structure of knowledge - its connectedness and the derivations that make one idea follow another - is the proper emphasis in education (p. 120)."

The second claim for emphasis on structure is that by constantly re-examining material taught in the schools for its fundamental patterns of organization, the schools should be able to bridge the gap between 'advanced' knowledge and 'elementary' knowledge. As a result, scholars in the various fields and their professional organizations have made proposals for revamping the curriculum in the elementary and secondary schools, notably in economics, geography, anthropology and history.

The focus of attention in each of these projects is



an individual discipline. Little or no attention is given to the relationship of the individual fields to each other or to the program of studies within which they must find their place (Bellack, 1964, p.265).

This growing pluralism within the disciplines presents problems for the curriculum developer. The curriculum developer needs to be concerned, not only with the structure of the individual disciplines but with the structure of the instructional program.

What general structure of the curriculum can be developed so that the autonomy of the parts does not result in anarchy in the program as a whole (Bellack, 1964, p. 266)?

Bellack continues that categorizing knowledge in broad groups of related disciplines is the essential first step in establishing a pattern of studies for general education. But once this has been done, difficult instructional problems remain.

- 1. How shall the disciplines included in the same broad category be organized for instructional purposes?
- 2. Is it feasible to integrate for the purpose of instruction fields that are not integrated at the level of inquiry?
- 3. Shall they be taught separately (Bellack, 1964, p. 269)?

 Bellack now turns his attention to the social sciences. The

 social sciences all seek explanations of the same phenomenon, man's social

 life. Each discipline formulates its own questions about this subject

 matter and has developed its own system of concepts to guide the research.

 Each discipline is abstract and deals only with certain aspects of man's

 social life. Crary agrees with Bellack to a point but warns that disciplines "sometimes obscure reality rather than enhance it by the in-

sularity of their perspective and the preciseness of their concerns



(Crary, 1969, p. 201)." Bellack agrees with Davis that insofar as the prediction of actual events is concerned,

the various social sciences are mutually interdependent because only by combining their various points of view can anything approaching a complete anticipation of future occurrences be achieved (Davis, 1950, p. 8).

Bellack (1964) concludes that policies that are proposed and actions that "are taken to deal with problems in social affairs are of necessity inter-disciplinary, for concrete social reality is not mirrored in the findings of any one discipline (p. 270)."

This approach does not presuppose a "unified social science" as the basis for planning the elementary and secondary curriculum. Bellack recognizes the plurality of methods and conceptual schemes of the social sciences yielding a vast confederation of separate areas of study. Modes of thinking and analysis differ from field to field. Simultaneously, there are interconnections among the social sciences that curriculum planning must take into account.

The progressive movement with its problem solving approach had several weaknesses. One was the students' lack of first hand acquaintance with the disciplines thus presenting difficulty when dealing with problems. "Problem-solving on such a broad base cannot be pursued successfully without growing understanding of the fields of knowledge on which the problem-solver must draw (Bellack, 1964, p. 275)."

Bellack recognizes the value in systematic study of the various social science disciplines and the importance of developing competence in dealing with problems and issues that are broader than any one field. He formulates a most logical question: Why should opportunities for both types of activities not be included in the program for all students?



One might envision a general education program that would include basic instruction in the major fields of knowledge.....together with a coordinating seminar in which students deal with the problems "in the round" and in which special effort is made to show the intimate relationships between the fields of study, as concepts from these fields are brought to bear on these problems (Bellack, 1964, p. 275).

It appears, therefore, that Bellack's proposal is the same as the ones advocated by Phenix (1964) and Joyce (1965).

Phenix. Phenix organizes knowledge into the six realms of meaning:

The six realms of meaning provide the foundation for all the meanings that enter into human experience.....any particular meaning can be analyzed as an expression of one of the fundamental meanings or as a combination of two or more of them....the six realms.....may be regarded as comprising the basic competences that general education should develop in every person..... (Phenix, 1964, p. 8).

This organization of knowledge and philosophy presented here in capsule form represents the framework of the remarkable book, Realms of Meaning, and serves as a foundation for the discussion to follow. In this volume, Phenix discusses four principles for the selection and organization of content, three of these principles are especially relevant for discussion here.

The first principle is that the content of instruction should be drawn entirely from the fields of disciplined inquiry. Phenix asserts that the richness of the culture and the level of understanding achieved in an advanced civilization are indeed due to the work of men who have been and are organized into communities of specialists. This is his rationale supporting the use of materials from the disciplines. Phenix (1962) defines a discipline as "knowledge organized for instruction



(p. 273)." However, this

does not constitute an argument for education to return to a traditional subject matter curriculum. It simply argues for the exclusive use of materials that have been produced in disciplined communities of enquiry by men of knowledge who possess authority in their fields. Given the developments in disciplined inquiry, the proposal to use knowledge from the disciplines favors a modern rather than a traditional type of curriculum (Phenix, 1964, p. 10).

This discipline principle is not an argument for a departmentalized curriculum for the elementary school. Rather, "it is possible to use knowledge from the disciplines in connection with studies that cut across several disciplines (Phenix, 1964, p. 319)." Therefore, a social studies course might draw upon authoritative materials from the disciplines of history, economics, sociology, political science, etc. It is interesting to note that the first principle of selection does not prescribe any mode of organizing materials of instruction rather it prescribes that whatever is taught, in whatever manner it may be arranged, be drawn upon the scholarly disciplines.

The second principle discussed by Phenix is that from the large resources of material in any given discipline

items should be chosen that are particularly representative of the field as a whole,..... this aim can be achieved by discovering those key ideas that provide clues to the entire discipline (Phenix, 1964, p. 11).

Phenix disagrees with Bellack (1964) and believes that only the specialists in the disciplines can really accomplish this. Specialists must become aware of their enterprise as a whole and to be able to develop "interpretive categories in which to express the interrelationship of ideas within the subject (Phenix, 1964, p. 326)." This idea can be carried one step



farther because only in so far as specialists are successful in this venture will the key ideas or structure of a discipline or indeed the common ideas that cut across these disciplines be suitable for classroom teaching.

The third principle expressed by Phenix has very serious implications for the social studies and those who would use an interdisciplinary approach in particular.

Content should be chosen so as to exemplify the methods of inquiry and the modes of understanding in the disciplines studied. It is more important for the student to become skillful in the ways of knowing than to learn about any particular product of investigation. Knowledge of methods makes it possible for a person to continue learning and to undertake inquiry on his own....the modes of thought are far less transient than are the products of enquiry (Phenix, 1964, p. 11).

Thus, Phenix states very precisely the importance of process skills. Phenix believes that methods of inquiry are most readily taught when studies are arranged by disciplines. In studies organized across disciplines but within the same realm the general methods applicable to that realm may be taught. "Broader interdisciplinary studies, such as programs combining the social science, in which resources from many disciplines must be used, are not so favorable to the teaching of methods (Phenix, 1964, p. 340)." He expands this statement by stating that this is because each of the several component disciplines has a different method and that no clue is provided by the content itself as to the methods appropriate to a composite inquiry. "For the inter-disciplinary type of course, the synoptic disciplines may provide useful suggestions concerning methods of integrating meanings for several different realms (Phenix, 1964, p. 340)." Others share Phenix's concern for process, but, "One does not teach social



one teaches social science, and, in the process, one unavoidably teaches method (Price, 1969, p. 49)."

Phenix offers several criticisms of the cross - disciplinary or interdisciplinary studies. He says that it offers a temptation to shallow, nondisciplined thinking because of the mixture of methods and concepts involved. He claims they require more knowledge and skill, greater preparation and mastery of materials than do multidisciplinary studies where the lines of thought and process may be kept more clearly in view. Implicit in what Phenix has said is the notion of a somewhat different role for a teacher.

Phenix, speaking on a different topic, <u>Education and Mass</u>

<u>Communication</u>, expands on this evolving role.

The teacher is no longer a person whose main function is to impart information or even demonstrate skills..... in the age of the mass media the teacher's functions shift to emphasis on selection, evaluation, interpretation, application and individual guidance (Phenix, 1969, pp. 327 - 328).

The work of Phenix does have particular meaning for a teacher who may attempt an interdisciplinary approach to social studies instruction. Effective teaching does imply some reasonable pattern of organization to avoid haphazard instruction with miscellaneous experience - having no clearly defined plan or purpose. Phenix recognizes that no one plan for organizing subject matter for instruction is "best" for all students in all situations. Two criteria are essential:

If a teacher is <u>enthusiastic</u> about his way of organizing the material.....

If he follows a plan that is <u>meaningful</u> to him

Admitting the need for a variety of techniques to meet a wide



variety of teaching situations, the author states that, the interdisciplinary approach is the

way of the theoretically minded person, who loves abstractions above all. Concrete instances he regards beneath his notice for he dwells on the lofty atmosphere of pure idea. This kind of teaching would be tolerated, if at all, only at the higher academic levels. Children and young people would gain nothing from it and would properly react strongly against it, because it is too remote from their concrete experience (Phenix, 1964, p. 328).

King and Brownell. King and Brownell (1966) appear to make no distinction between the terms interdisciplinary, multidisciplinary, or nondisciplinary. They define interdisciplinary or multidisciplinary studies as "direct attempts to achieve certain educational purposes by crossing, fusing, bridging or surpassing known disciplines (p. 144)."

The authors encapsulate the rationale of those who tend to support an interdisciplinary approach and attempt to respond to it in a critical vein. They contend that,

educators who embark on the poorly chartered waters of nondisciplinary or interdisciplinary study bring to mind the mariners of ancient legendary Greece, who were lured to shipwreck and destruction on the shoals of an unchartered island by the beguiling and irresistible singing of three sirens (King and Brownell, 1966, p. 144).

King and Brownell discuss eight reasons supporting the interdisciplinary approach. Consideration of the counter and counterpoint presented by these two writers may lead to a clearer understanding of interdisciplinary theory.

The <u>first</u> reason is the "beguiling theme of values, of appropriateness, or of virtue (King and Brownell, 1966, p. 144)." Interdisciplinarians believe that disciplined study may teach about morality and



citizenship but what guarantee do we have that the children will behave morally and acceptably? The school is required by society not only to instruct in the disciplines of knowledge but to establish situations designed to promote those behaviors agreed on as essential for living in our society. Baker's American Studies Program (1963) and the Syracuse Project (1964) are good examples representing this concern for values.

King and Brownell (1966) accuse interdisciplinarians of simplicity. The problem of virtue, of appropriateness of behavior is so important that it occupies a great deal of man's greatest efforts at conceptualization and expression. "This theme dominates the output of the fields of religion, literature, philosophy and others (p. 146)." Also, there is a core of values for which the school is directly responsible, indeed, especially equipped. That is, values implicit in intellect itself: probing questions, clarity of language, attention to the cannons of each tradition of human thought and the committment to the advancement of truth and meaning. King and Brownell insist that the intellectual life is not inattentive to moral action. Finally, the school speaks to the student more directly and effectively by example.

Morality and values are not taught directly but indirectly through example, contagion, and reflection. We must not simplify the moral nature of man; we must not assume that we can develop good men in the good society through planned educational action (King and Brownell, 1966, p. 147).

The <u>second</u> reason in the rationale for interdisciplinary study is that the disciplines do not lead pupils to the study or solution of the immensely complex problems of the nation's social political and economic life. These problems are larger than the scope of a discipline or a group of disciplines.



When immature pupils and their teachers, teachers who may command one mode of inquiry at best, undertake to attack.....global problems and unfathomed problems.....the schools defraud the students and the community by promising much and delivering little (King and Brownell, 1966, p. 147).

Third, it is argued that an interdisciplinary view is more appropriate for general education and a necessary prerequisite for specialized study in the disciplines. The child does not view the world in compartments but in a "whole" way. The pluralism of the disciplines does not encourage instruction in a simple, noncomplex way. King and Brownell agree with Phenix (1962) that the disciplines give analytical simplicity and synthetic coordination. Interdisciplinary approaches lead away from clear language, ideas and from productive models of thought. Rather the approach leads to "the buzzing and the superstitious confusion of the primitive mind (King and Brownell, 1966, p. 147)."

King and Brownell dismiss the fourth theme of <u>usefulness</u> espoused by the interdisciplinary advocates stating quite simply that commitment to usefulness has not been supported by evidence.

Modernism is the fifth theme in the interdisciplinary rationale. The demands of the times require preparation in the newer and more efficient approaches to escape the limitations of the traditional disciplines. King and Brownell (1966) claim that such beliefs do not recognize the true nature of disciplined thought. "When the disciplinesare seen as 'ways of knowing' rather than accumulations of factsthe progressive nature of the disciplines is quite apparent (p. 148)."

The sixth theme in the interdisciplinary rationale is that of skill development. King and Brownell counter that skill development



often gives rise to notions of training, conditioning, memoritor modes of teaching and mindless drill. They suggest the abandonment of the term skill and the substitution of performance capability in a wide range of important human abilities.

The seventh rationale is dedicated to the idea of <u>coverage</u> "Inter-disciplinary approaches are necessary and efficient organizations
of knowledge for a jam-packed curriculum (King and Brownell, 1966, p. 146)."
King and Brownell assert that the passion for completeness should be resisted,

schoolmen need not think that they are responsible for the complete man at the end of any level of schooling.....intellectual life will go on.....we have entered an era of lifelong educational opportunities. The command of a few intellectual structures is of much greater theoretical and practical import than the survey or exploration of many (King and Brownell, 1966, p. 149).

King and Brownell conclude with a brief discussion of the eighth theme, <u>futility</u>. Their very symbolic treatment of the thesis topic adds a measure to comprehending interdisciplinary theory.

Parker and Rubin. Parker and Rubin present a very interesting model of interdisciplinary learning in a process-centered curriculum. They propose that the learning situation consists of three interacting operations: the learner must take in data, manipulate it and ideally he must be able to apply data. Each of these operations can be carried on in a variety of ways, and each is accompanied by particular methods, techniques and processes. The major problem appears to be in the attaining of a balance of intellectual activity and time for each. The intake of information is basic whether it be through the discovery of a principle, the reading of a



text book or some other method. Beyond this, the learner needs to <u>manipulate</u> the data in some systematic way. This will enable him to understand it better, organize it in his mind, and appreciate its potential usefulness. Lastly, he must make deliberate <u>use</u> of it in order to assess both its significance and potential (Parker and Rubin, 1966).

Parker and Rubin's model attempts to take these three operations into consideration. However, it also attempts to compensate for another problem familiar to curriculum designers. The authors recognize that the classification of the traditional disciplines is based on the unique character and method of the subject matter. Each has a particular structure and way of dealing with its content. However, human activity draws not from any one discipline but rather from a composite of disciplines.

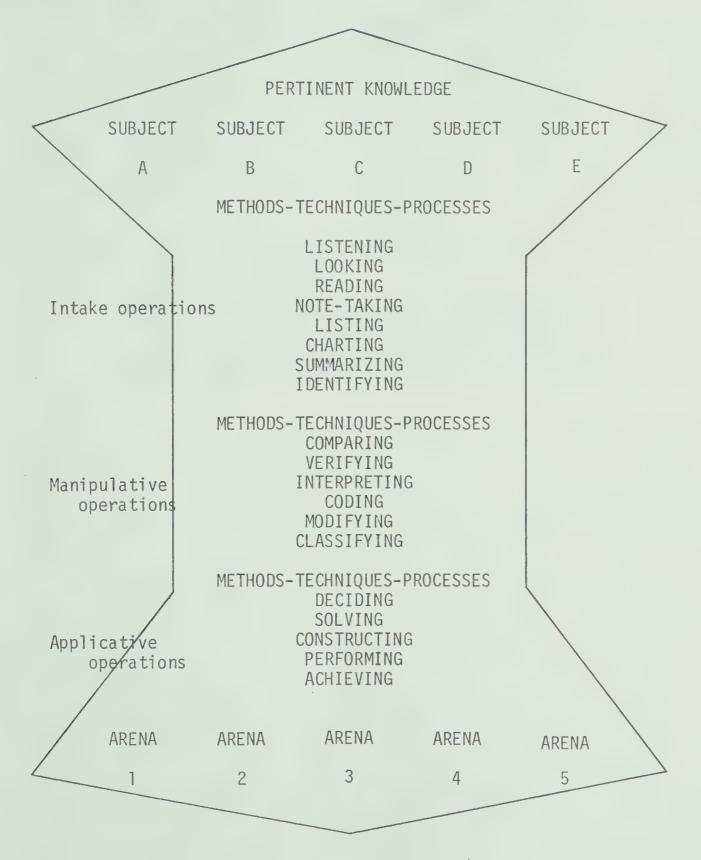
Reasonably, a scheme for classroom learning, based on the major operations involved, can also emulate the habit of the practitioner and transact learning in a more realistic setting than that provided by a single discipline (Parker and Rubin, 1966, p. 62).

Model I is a simple arrangement by which different kinds of subject matter can be fitted into a particular learning situation at the intake level and different consequences assessed at the applicative level. Each of the major operations, intake, manipulation, and application is transacted through different methods, techniques, and processes. Methods and techniques make it clear that process ought to be the central, but not the exclusive course to acquiring information. Methods refer here to formula type of activity and techniques to more sophisticated technical skills.



FIGURE IV

OPERATIONS IN INTERDISCIPLINARY LEARNING IN A PROCESS-CENTERED CURRICULUM



(Reprinted from Parker and Rubin, 1966, p. 63)



This model is umbrella like at both the intake and applicative phases - deriving data from any relevant discipline and applying it to appropriate problems. The intensive focus develops at the manipulative stage. It is here that information is moulded into a reasonably useful tool.

Parker and Rubin say that objections to the model may be made on the basis that attention is taken away from the subject matter. There is widespread belief that eclecticism in learning is wasteful, inefficient and that disciplined study should be the central focus. Also, teachers of disciplinary content are inclined to proprietory attitudes. The history teacher should not object to a student reading some history with an eye towards its effect on sociology.

The bright student will any way. The nature of courses is not ordained in heaven, and conceivably a course or two could be designed that makes provision for cross application (Parker and Rubin, 1966, p. 64).

Taba. Taba ponders the influence that Bruner has had in many current discussions of the curriculum. Fundamental ideas, concepts and laws are sometimes referred to as the "structure of the subject matter (Bruner, 1960, pp. 6 - 8)." Possibly the essence of the content of social studies is less likely to be defined this way. The use of this term could easily be interpreted as necessity for focusing on individual and separate disciplines, "when actually the more fundamental the idea is, the more likely it is to point to relationships between the subjects (Taba, 1962, p. 270)." Taba maintains that school subjects are but convenient categories of classification, subject to change because of the dynamic nature of knowledge and concepts of learning. Further, "the objective of disciplined thinking about basic ideas does not eliminate the possibility of organizing the curriculum



around ideas which cut across many disciplines and are supported by the study of facts combined from many subjects (Taba, 1962, p. 270)." It is to be noted that Taba qualifies the word thinking and uses the phrase "disciplined thinking".

Taba establishes the chief obstacle to an "integrated" curriculum. It is not that integrated knowledge itself jeopardizes disciplined thinking but it is more difficult for a teacher to plan an integrated curriculum and to operationalize that plan. Stratemeyer et al agree with Taba and elaborate somewhat,

it is possible, too, that a teacher with limited insight may fail to sense the concepts that could be developed and may allow a group to spend too much time in a particular aspect of the problem.....the result could be..... little provision for arriving at generalization and few of the virtues of thorough or systematic exposure to an organized body of subject matter (Stratemeyer, 1957, p. 102).

Taba believes that integration of knowledge is an important issue. The definition of integration used by Tyler (1950, p. 55) stresses the horizontal relationship of the various areas of the curriculum to each other. This is the definition most frequently used in writing about curricula. But Taba (1962) feels that integration is also something "that happens to an individual (p. 299)." This conception leads to a concern, "with the integrative process in which man engages as he strives to organize in a meaningful fashion knowledge and experiences which at first seem largely unrelated (Dressel, 1958, p. 22)." Bloom explains this as seeing relationships between experiences or knowledge that may be separated in one's personal experiences (Bloom, 1958, pp. 86 - 88). This interpretation of integration emphasizes locating integrative threads e.g. "an idea, problem, method or device by which two or more separate learning experiences



involves developing more consistent patterns of thinking in the various subjects by stressing "the broad concepts which the more specialized subjects share in common, and by seeing to it that the students develop a consistent framework for understanding the ways in which these concepts are used in these disciplines (Taba, 1962, p. 301).

This consideration of the term "integrated" is designed to indicate variations in the use of the term. Taba used integrated in much the same manner that Johnson (1956) uses general education and Womack (1966) uses interdisciplinary. If indeed one is to consider an interdisciplinary approach, is it the horizontal relationship between the social science disciplines that is to be stressed or is it something rather more comprehensive that is to be developed as indicated by Taba?

Taba, like Oppenheimer, does not agree with the pursuit of the separate disciplines. The greater need is to develop common perceptions by dealing with ideas which cut across fields instead of pushing specialization to an earlier age in school (Oppenheimer, 1958). However, Taba does recognize that there have been valid criticisms of the attempts to integrate knowledge for instruction. Tyler, for example, establishes three criteria commonly considered necessary for a well-organized curriculum, namely, continuity, sequence and integration.

Typically, however, the only principle of integration which has been explored is to bring together the content and the skills needed to deal with each of the student "problems" which provide basic units of the course. This principle does not always provide for the necessary continuity and sequence nor for all the more helpful relationships among the fields which are involved (Tyler, 1964, p. 107).



Taba's response to this is that by a very careful analysis of basic ideas in various fields, it should be possible

to identify ideas that have relevance to several disciplines.....or even across areas. If the substance for developing these ideas were drawn with equal care from diverse fields, integration of knowledge and broadening the subject offerings should be possible without a corresponding loss in depth, precision and intellectual discipline (Taba, 1962, p. 191).

An example of such a program is Taba's generic curriculum developed in conjunction with the Contra Costa County school system in California. Certain basic concepts have been selected by Taba for development over all of the years of the program. These are cultural change, cooperation, interdependence, causality and differences. A second level of knowledge used in this framework is referred to as "main ideas" or generalizations drawn from the several social sciences. These main ideas serve as the centers around which units of work are developed. Specific facts are also selected as a third level of knowledge (Taba, 1967). A very important aspect of the Taba curriculum is mentioned by Sowards and Scobey.

Included are carefully devised strategies and sequences for teaching so that teachers will be helped to know what to do and when, in order that what goes on in their classroom is consistent with the potential built into the overall framework (Sowards and Scobey, 1969, p. 288).

However, one difficulty with Taba's curriculum is pointed out. "Teachers need preparation to use it. They will have to learn some relatively esoteric terminology and the teaching strategies.....many teachers will need experience in work-shop situations.....(Sanders and Tanck, 1970, p. 409)."



Social Science Theorists

Five authors are selected for discussion under this section:
Berelson, Sherif and Sherif, Milgram and Odegard. The review of the
literature is begun by considering the work of Bernard Berelson because
it provides an excellent framework for illustrating the position papers
of Strayer, James, Long, Lewis, Sykes and McKeachie. These writers
support Sykes' position regarding their own respective disciplines.
"That a much more thorough treatment of sociology should be incorporated
in existing social studies for all students (Sykes, 1962, p. 169)." These
writers, therefore, represent the view of many social scientists and
academicians who view the social studies as separate but somewhat related disciplines, history, sociology, economics, political science, etc.

Sherif and Sherif are two social scientists who support inter-disciplinary efforts. While they address their remarks to fellow social scientists, their comments have relevance to those who would consider an interdisciplinary approach to the social studies.

The work of Milgram and Odegard represent positive attitudes toward interdisciplinary study and their theory has specific relevance to teachers in the field.

Berelson. In 1962 the American Council of Learned Societies and the National Council for the Social Studies sponsored a book entitled, The Social Studies and the Social Sciences, in the conviction that a formulation of the general and content objectives of the social studies "may prevent revisions of the separate parts from once again foundering for lack of a central rationale (Turner, 1962, forward, p. vi)." The volume contained a number of position papers written by scholars representative of the various social sciences. In the introduction to the book, Berelson



attempted to pull the threads together into an emerging pattern bringing out and underlying some points that the scholars made in common. Several of the issues that Berelson devotes himself to are important in view of the thesis topic.

The interdisciplinary approach to Social Studies is centrally concerned with the development of good citizens (Engle, 1965; Hanna, 1962; Johnson, 1963). One of the issues to which these position papers speak is, "Should the social studies curriculum aim to produce good citizens, or knowledgeable students of the major fields of learning (Berelson, 1962, p. 6)?" Implicit within this question is the continuing debate between interdisciplinarians and multidisciplinarians, frequently represented by the social scientist, concerning the priorities of objectives in the social studies. Berelson feels that the question of good citizens versus knowledgeable citizens is largely a spurious issue that could be put in a different semantic framework. Berelson (1962) says that, if we were to say, that all of us involved in education want to give students the best introduction we can, within the limits of practicality, to the best available knowledge from the social science disciplines "as a means to the end of producing responsible citizens (p. 7)." This sentence would go a long way toward resolution of the issue.

The scholars are quite clear that preparation for responsible citizenship is important. In every case, the scholar's position papers indicates what they would prefer their subject, whether psychology, sociology, anthropology or whatever, to be presented for its own intellectual sake (example: James, Long, Lewis, Oliver, Petrovitch, 1962). These social scientists go on to argue that "this is indeed the best 'preparation for responsible citizenship' so far as" their field is concerned (Berelson,



(1962, p. 7).

Berelson discusses several reasons why the social scientists hold this position, one reason is sufficiently common to deserve attention.

Berelson says that we are training children for the twenty-first century.

Who will now venture to predict what the demands for responsible citizenship will be by then? Social scientists believe, therefore, that the least we can do for our students is to give them a fundamental, intellectual preparation that will last rather than a utilitarian preparation suitable to today that will become outmoded so soon.

How then would you prepare students to meet the demands of the future which will be very different from those of today? The authors of the symposium indicated certain concepts that students should know.

Berelson says that there is a certain amount of overlap among the illustrative recommendations made by the nine authors. Berelson (1962) views these overlaps as "encouraging instances of convergence that speak well for the prospects of putting together a coherent curriculum (p. 9)."

This should not be interpreted that Berelson is of interdisciplinary pursuasion. Rather to the contrary (Berelson, 1963; Engle, 1965).

Komarovsky (1957) clarifies somewhat Berelson's notion of convergences. Komarovsky indicates five instances of the convergence of several social science disciplines. One example illustrated here will put Berelson's remark in its true perspective. Komarovsky (1957) explains that a convergence between disciplines exists "when empirical data being accumulated in one field could be illuminated by concepts existing in another (p. 22)." Berelson, while not adhering to an interdisciplinary philosophy does recognize that there could exist these instances of convergences within the social science disciplines. Berelson would further



argue that for a student to recognize and benefit from these common areas of convergence, that student would have to have been schooled in the distinct knowledge, and skills of the individual disciplines.

Berelson concludes his introduction to, <u>The Social Studies and the Social Sciences</u>, by considering an issue discussed by the various authors and one that is relevant to the thesis. This issue centers on the organization of the social studies curriculum. Berelson (1962) views this issue as a political one in that "disciplinary claims for inclusion are as many and profound as the countering pressures of time (p. 13)." He claims that the disciplinary remodelers of the curriculum have only their subject, their method of inquiry and their own criteria of truth to satisfy. Berelson recognizes that in the social studies, which is "not a subject but rather a federation of subjects (Keller, 1961, p. 60)," a different situation exists in which psychologists must somehow come to terms with sociologists, economists, etc. Berelson concludes that,

enriching reorganizations are possible and..... require considerable thought, ingenuity, and especially experimentation. The degrees of freedom are many, and the efforts to reorganize will almost certainly find several good ways to proceed rather than one best way. At this stage, at any rate, that approach to multiple outcomes is less likely to lead to bad mistakes (Berelson, 1962, pp. 14 - 15).

Sherif and Sherif. Sherif and Sherif are highly positive with regard to interdisciplinary study. They present the thesis that

- 1. The trend toward interdisciplinary collaboration and coordination is irreversible to the point of no return.
- 2. Many practical difficulties in interdisciplinary endeavours have arisen through failure to deal adequately with the central



substantive issue.....the core problem of why interdisciplinary efforts have come into existence and why they are a necessity for the development of each of the social sciences.....

3. Each discipline needs others in a fundamental and basic sensewe refer here to the very basic issue of the validity of generalizations.....(Sherif and Sherif, 1969, p. 5).

The authors believe that interdisciplinary efforts will contine despite "the imperialisms and the self-contained ethnocentrisms of the various disciplines (1969, preface p. ix). They share the concern for specialism that Cooke (1963) does when he says that we must "overcome the cultural parochialism that is considered the residue of specialism (p. 418)."

Why is interdisciplinary callaboration a necessity? Sherif and Sherif advance the theory that man does not arrange his problems or divide them up neatly along lines laid down by the various disciplines. On the contrary, there is a great deal of overlap in the subject matter considered by the social science disciplines. They would argue that "due to the ethnocentrism of disciplines, what we get.....is a redundant piling up of highly similar specialties (Campbell, 1969, p. 328)." Sherif and Sherif ask this question: Which among the social sciences would care to abdicate altogether any reference to the family, to groups, political or economic life? "The different disciplines are studying and theorizing about many of the same problems and many closely related problems of the human condition (Sherif and Sherif, 1969, p. 7)."

Sherif and Sherif recognize that advances have been made within the social sciences but they maintain that it is impossible for any one person to be an expert in all the disciplines.



But it is not so obvious that a single discipline which buries itself in order to concentrate on its own problems, theories, techniques, and data collection to the exclusion of others will end up being a know-nothing. The self-insulation of a social science discipline is ostrich-like. It will not and cannot protect the bird from impending danger (Sherif and Sherif, 1969, p. 7).

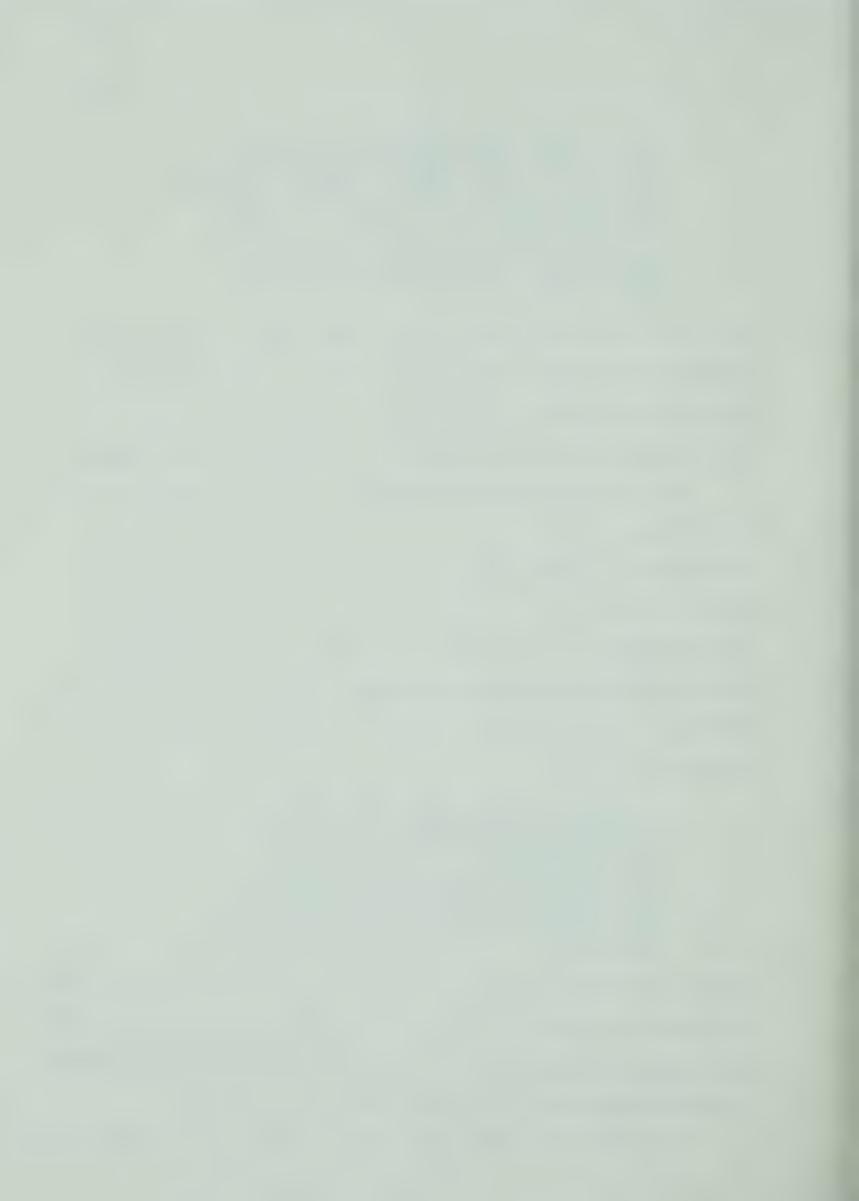
This rather strong statement has direct implications for any teacher regardless of the level at which he may teach. One may agree or disagree with the statement, nevertheless, it does stimulate thought and the speculations which it presents will be discussed in later chapters.

Why is interdisciplinary coordination and collaboration required for the sake of validity? Sherif and Sherif claim that many social scientists are hesitant, often justifiably so, about premature applications of their theories. This hesitance is due in part to the relatively recentness of the disciplines as scientific ventures together with the uneven advance that has been made. They claim that within the confines of a single academic discipline, it is possible to avoid the criterion of validity.

As long as we have to deal only with our colleagues, we talk instead of reliability, of measurement and representativeness of sampling techniques. We refine our tools and techniques for these purposes until we are in the gravest danger of being reliably and representatively wrong (Sherif and Sherif, 1969, p. 7).

But the question of validity is another aspect of interdisciplinary theory so frequently attacked by critics of the approach. On this basis, further consideration of the question of validity is deemed advisable. The following example offered by our two writers merits our attention.

Sherif and Sherif (1969) state that "by validity we mean the ability



of theoretical formulations to make accurate predictions and eventually to be translated into means for control of the phenomena in question (P. 7)." The example they use is the following. The concept that Sherif and Sherif select for illustration is that of "groups". There is a sociology of groups as functioning social units and a psychology of groups in terms of their individual members. For many years sociologists have collected data about group life and more recently psychologists have turned out abundant research on individual functioning within groups.

Surely the two lines of research should be related if we are to have a rounded picture of the problem area. Surely the generalizations reached at the sociological level and the psychological level of analysis should not be contradictory. In fact, the question of whether or not they mesh constitutes one test of their validity (Sherif and Sherif, 1969, preface ix).

However, Schwab (1964) has warned of the dynamic nature of know-ledge. A teacher must be aware of this dynamism.

Sherif and Sherif do not believe that the solution to the substantive problem of interdisciplinary relationships lies in the breeding of a generation of supermen who know all about psychology or sociology, that is, disciplinarians. Nor is it seen in a smattering of superficial acquaintance with this and that social science. The solution to this problem is seen by having social scientist's define "the bearings of one's discipline relative to others, of knowing when and who is needed, and in interchange devoted toward borrowing from others what is needed for one's own discipline (Sherif and Sherif, 1969, p. 15)." This remark obviously has meaning for social scientists. Nevertheless, consideration of the writings of Sherif and Sherif have served to illuminate several ideas relevant and important to the thesis topic:



- 1. That there is an interdisciplinary trend not only within education but also within the social sciences;
- 2. that these two social scientists recognize a rationale for interdisciplinary studies;
- 3. that the question of validity of interdisciplinary generalizations and concepts can be viewed somewhat more assuredly through the use of the approach; and finally
- 4. that the three above items do have implications not only for social scientists but for teachers as well.

Milgram. Milgram, a social psychologist, supports interdisciplinary study within the social sciences. His work also has relevance to those who would pursue interdisciplinary studies in the social studies.

Milgram maintains that when a social scientist frees himself from the narrow perspectives of his academic discipline,

intellectual cross-pressures generated by an interdisciplinary outlook liberate a person's thinking from the limiting assumptions of his own professional group, and stimulate fresh vision (Milgram, 1969, p. 103).

If this is so for the social scientist would it not be true to some extent for the student engaged in an inquiry in the social studies? For example, instead of viewing the Viet Nam war from the perspective of history alone, would not consideration of interdisciplinary insights from anthropology, sociology, economics, political science and geography stimulate a fresh vision of this very contemporary dilemma?

To say that a problem is treated in an interdisciplinary fashion can mean a number of things, according to Milgram, depending on the exact point in the process of inquiry at which interdisciplinary thinking is introduced. It may enter into the formulation of the problem chosen for study,



that is, one may conceive a problem in such a way that it lies astride two or more disciplines. After the problem has been chosen, the investigation must decide what research techniques and procedures will be used to study it. An interdisciplinary outlook may be helpful. Milgram states that research procedures typical of one discipline may be applied to particular problems studied by another discipline. Wise (1966) does not agree and poses the question "How can we integrate knowledge in a disintegrated world (p. 392)." But Milgram persists that sometimes an investigator working solely within his discipline comes across a fact that cannot be explained with the knowledge available to him and must search in another discipline for the needed explanatory principle. In other words, an interdisciplinary approach can add to the knowledge and skills of any one specialist (Carson, 1958, p. 30). Finally, in its application, a finding, insight or a concept that has been generated within a single discipline may achieve interdisciplinary breadth (Milgram, 1969, p. 103).

Milgram adds one very important qualification. He feels that although interdisciplinary thinking may play a part in any of these four aspects of a problem, the earlier it is introduced into the process, the less superficial it is likely to be, and the more likely meaningful intellectual benefits will occur.

Milgram's proposal and rationale is not agreed with by Dubin (1969) a research Professor of Sociology. "The traditional approach to interdisciplinary cooperation has been singularly sterile in its consequences (p. 75)." Dubin's solution, contrary to Milgram's, is contiguous problemanalysis.



Odegard. Ratcliffe and Lee discuss the continuing debate of multiversus - interdisciplinary organization in the social studies. The interdisciplinary approach will remain the dominant pattern owing to position statements such as those of Odegard, a political scientist, Kohn, a geographer and Hanna (Ratcliffe and Lee, 1970).

Odegard feels that our nation's education is confronted with some extraordinarily difficult questions several of which are relevant to our topic.

Can we reconcile the increasing demand for specialized training with the increasingly important demand for a liberal education? Odegard asserts that we live in a world in which specialization is increasingly necessary to survival in nearly every walk of life. There are dangers in the current trend toward greater and greater specialization yet without the specialization it is unlikely that the knowledge explosion of our generation could have occurred.

One of these dangers is the gap between appearance and reality.

When John Doe is reduced to his basic elements and placed in neatly

labelled bottles, one is inclined to ask, where or what is the real

J. Doe? Similarily, when a political or an economic community is reduced to a series of systems or sub-systems, each system trying to maintain its own equilibrium, and maximize its own interests, what happens to the community?

If we are to put man and the human community back into this picture, we're going to have to get used to looking at them as a whole as identifiable persons living in some sort of meaningful communion with one another (Odegard, 1970, p. 176).

This rationale, on the part of a political scientist, is important and



does resemble Hanna's (1963) plea for wholistic study of man.

Specialization and analysis are the next problem, "the establishment or re-establishment of order and meaning among otherwise disparate and meaningless particles of information (Odegard, 1970, p. 176)."

Odegard says that analysis may clarify but it does not, of itself, create knowledge. Knowledge comes not from more and more facts about less and less but from the facts of life presented in a meaningful context. What Odegard appears to be saying is that the disciplines by virtue of their increasing specialization are looking deeper into minute aspects of the whole. The result is unrelated bits of information that in themselves are meaningless.

This type of specialization and analysis..... has been pulling ment and their world apart.....Disintegration through analysis has made fusion and coordination of some kind imperative if we are not to fly apart. Indeed the rediscovery of a unified sense of direction and purpose has become a matter of life and deathnowhere is this more important than in education (Odegard, 1970, p. 177).

Odegard does not agree with the emphasis on specialized training in the elementary school grades because it makes the problem of co-ordination and holistic understanding very difficult. He claims that the progressive fragmentation of life as it exists is contributing to an increased sense of alienation that in many cases results in rejection of the social order itself.

Odegard does not argue that specialization is the cause of this fragmentation of modern society but he does believe that the specialization of the disciplines not only breeds fragmentation of effort and of knowledge but also compels cooperation and integration.

The interdependence of specialists upon one another is evident in every walk of life.....Few of them,



I suspect, would pretend that their work is wholly without economic, political or social implications (Odegard, 1970, p. 178).

Odegard phrases his last question: How can we reconcile know-ledge and the structure of knowledge with the common needs and experiences of mankind in the elementary school, in the teaching of social studies? To introduce into the curriculum separate courses in all the specialized disciplines is impossible.

Is it not possible.....to develop a social studies curriculum at the elementary school level in which many, if not most of the critical terms and methods of the various social sciencescan be taught.....as essential parts of a coordinated scientific study of the world in which the pupil lives, and to identify the problems of adaptation and change which he confronts (Odegard, 1970, p. 179)?

This is not a disorganized compendium of facts type curriculum being suggested but a problem - centered, process oriented, intellectually rigorous coordinated social studies program. As a result, the child will come to understand the interdependence of the social science disciplines in studying the human condition through time and space.

The different social scientists do, of course, study the sociosphere from different points of view (Boulding, 1970). But as Kuhn states, we are moving very rapidly toward a unified social science because the sociosphere is a unity in itself offering a single system to be studied. If this is so, then social studies educators should be aware of the rationale impelling us in this direction. The work of Odegard cited here is considered one good position statement in this regard.



Summary

This chapter together with Chapter II provided a frame of reference for the synthesis to follow. Chapter III was composed of a description of twelve theories relating to the interdisciplinary approach. These theories were placed in one of two categories: curriculum development and social science. The purpose of this division was first, to bring together the theory of writers in the same field to facilitate comparison within that category and secondly to permit the contrasting of theories within the major two categories.

The curriculum theorists discussed were Bellack, Phenix, King and Brownell, Parker and Rubin, and finally Taba.

The social science theorists discussed began with Berelson and were followed by the work of Sherif and Sherif, Milgram and concluded with Odegard.



CHAPTER IV

THEMES IN THE LITERATURE

The literature has been reviewed. This review supports the position established in Chapter I that the literature related to the interdisciplinary approach is difficult to interpret. Two reasons appear to explain this difficulty. There is a notable lack of consensus regarding the definition of what the interdisciplinary approach encompasses. Secondly, there is a general diversity of positions assumed by the writers.

Nevertheless, despite the inconsistent terminology and, in several cases, the complete neglect to define the term, there appear certain similarities. These similarities appear not so much in what is said but in the topics that the writers have chosen for discussion relative to the interdisciplinary approach. For example, all the writers include discussions about the processes of the social sciences. That these processes must be included in the education of students is agreed upon by all writers. The method by which this goal is to be achieved is not agreed upon. Topics such as this appear as themes which are touched upon by the writers selected for the research. These themes have been chosen as a rallying point to indicate the various positions assumed by the writers relative to these themes. It is hoped that this approach will be of assistance in arriving at clearer definitions and in suggesting areas where research appears needed.

Four themes appear throughout the literature and these are used as a basis for synthesizing the various theoretical positions on the interdisciplinary approach. Values and citizenship development represent



the first theme. All writers recognize the importance of values in the curriculum and are aware of the special importance that the interdisciplinary approach attaches to values. The content of the social sciences is central to a discussion of the interdisciplinary approach. The third theme is related to the processes of the social sciences as these affect education in general and the interdisciplinary approach in particular. The fourth and concluding theme is the "How" of the interdisciplinary approach and it affords some insight to its application at the classroom level.

In discussing these four themes, the theoretical positions proposed by the writers who represent critics of the approach is included for two reasons. It is felt that consideration of opposing positions does further help to clarify the interdisciplinary approach and second, that such theory would provide insight into areas where further research might seem to be indicated.

Values and Citizenship Development

The whole question of dealing with values in the social studies curriculum is an extremely complicated one to which some attention has been given. It is not too surprising, then, that concern for values and citizenship development appears as a theme throughout the literature related to the interdisciplinary approach. The analysis and discussion of values and citizenship development focuses, not around the question as to whether or not values should be taught in the curriculum, but rather around the method by which this goal is to be achieved. All authors representing various positions along the multidisciplinary-interdisciplinary continuum recognize the importance of values in the



social studies curriculum. Each feels that his particular approach is the best one to achieve his particular goal in that direction. Many writers discuss the theme in terms of improving beliefs about values.

Improvement in beliefs about values. Johnson (1956); Engle (1960, p. 301); Hanna (1962, pp. 190 - 192); Jarolimek (1959); Taba (1967); Massialas (1963) for example view the central purpose of the social studies as the development in children of the attributes of good citizens. Engle puts their rationale into perspective:

The clear, and some would say extravagant, aim of those who wish to unify and synthesize the social studies is to influence, and perchance improve the quality of people's beliefs about both matters of fact and matters of value, as these beliefs relate to broad and important areas of life experience (Engle, 1966, p. 12).

What is important about this statement is that it implies that those who would support an interdisciplinary approach do not simply aim to influence but possibly to "improve the quality" of beliefs about values. This implies an element of change. Interdisciplinarians possibly view the function of education not simply as preserving or conserving basic values and truths (Hutchins, 1963; Adler and Mayer, 1958) but rather ascribe to themselves Dewey's creative role of shaping individuals or as Engle states, the improving of the quality of beliefs people hold. The quality of these beliefs and their subsequent improvement, rather than being the result of vigorous intellectual study of the individual social science disciplines, may be achieved only through direct experience in examining one's beliefs systematically and comprehensively. This is accomplished by restructuring and unifying the content of the various social science disciplines and bringing this content to bear more



directly on the broad problems of society. Johnson (1963) presents a similar position and agrees with Engle that the clear aim of the social studies is improvement in judgment about values.

Simply stating that the interdisciplinary approach to the social studies is concerned with the improvement in beliefs about values is not enough for some writers. They attempt to explain the importance of the notion of a "variety of values" relative to the approach.

Variation in Values. Johnson (1956) accentuates this aspect of the interdisciplinary approach. A student must be aware not only of values and their central role in social life, "but also the rich and wide variety of values and how they are related (p. 102)." Indoctrination, therefore, plays no role in the interdisciplinary approach or to use Johnson's term, in general education. He explicitly supports the instructing of the student in the infinite number and variety of values, "their similarities and their dissimilarities (Johnson, 1958, p. 240)." This approach is necessary because of the swift and certain changes our society faces. Johnson, while disagreeing strongly with Michael Scriven's approach to organizing the social studies content, would agree with Scriven's (1966, p. 129) that indoctrination is not a desirable approach in the educational process.

Engle (1965) supports Johnson's approach to values. Engle feels that the subject oriented group sees the role of the social studies as indoctrination. This group would look upon values as being final and absolute, to be accepted unquestioningly throughout the years of schooling. The separate subjects group view the objectives of social studies as teaching the student what to value, not how to choose from



among competing values (Engle, 1965, p. 13).

In reviewing the thoughts of Engle and Johnson, which are representative of other writers, one could conclude that they advocate the development of the objectivity and the open-endedness of the social sciences in dealing with issues of value. Also, many writers who are of interdisciplinary persuasion agree that some social scientists, by declining in the name of scientific inquiry to deal with values and valuing, abdicate in the realm of values to those who would willingly indoctrinate.

That values have an important place in the curriculum is agreed upon by most writers. What method should be used to attain their development is not. Several hypotheses are put forth centering around the rationale for studying or not studying the separate disciplines.

Separate or Merged. Engle questions further the rationale of those who would advocate the study of the separate social science disciplines in elementary education. The claim of some educators in this group is that such a process directly influences the quality of decisions made by citizens. Engle feels this belief is based on questionable and mysterious assumption.

Since the nature of the relationship between knowledge and values has never been clearly demonstrated, can it be assumed that the individual will discover for himself, the relationships that exist between fact and value, thus achieving a balanced view of the life scene of which he is a part (1965, p. 11)?

King and Brownell (1966) refer to this very question but many authors, like Engle, would agree that this assumption cannot be made (Johnson, 1956; Odegard, 1970; Kitzinger, 1968). The argument captured here is



the one about knowing and doing. Knowing the structure of the individual disciplines serves a purpose but not the objective of good citizenship development. Knowing and doing do not necessarily follow. Having the knowledge of the individual social science disciplines as separate entities will not ensure that a student will demonstrate and use particular values or good citizenship behavior. To ensure this type of results, specific objectives must be formulated and particular training must be insured. In brief, what is being denied by interdisciplinarians is that broad transfer of intellectual training takes place from the study of the separate disciplines to the making of valuative judgments.

Johnson (1963) presents a somewhat similar position. Agreeing with Engle, Johnson calls attention to the fact that citizens live and make valuative decisions in what he terms a "life space" or "area of experience" which goes far beyond and cuts across the discrete boundaries of the individual social sciences. Jarolimek (1967) suggests a similar line of reasoning. Further, he suggests that interdisciplinarians recognize that while the total school program contributes to education for citizenship, the social studies have a particular responsibility in this regard. The knowledge of the social science disciplines is a means of developing social and civic literacy. What Jarolimek is suggesting is that the primary purpose of the knowledge of the social sciences, for interdisciplinarians, is not the study of the subject per se. The perspectives and skills of the social sciences are important but not as ends in themselves. Jarolimek gives an example: the purpose is not to study political science because such a study has intrinsic value. Rather, political science is studied because for the learner that discipline has important insights concerning the operation of government and political



affairs. Jarolimek feels that there is merit in pursuing studies the way the scholars do, and pupils should have such experience from time to time. However, pupils should attack the study of social and civic affairs not so much from the point of view of the scholar as from that of the thinking, informed citizen (Jarolimek, 1967a, p. 7ff).

What is being questioned by the proponents of the interdisciplinary approach is the view that the social studies is a name designating a group of broadly related but disparate subjects (Keller, 1961; Berelson, 1962). Interdisciplinarians agree that the more scientific the bent of the social science investigator, the less he is concerned with questions of value and the more he divorces himself from the practical problems which face the ordinary citizen. By this view, citizenship education would be clearly separate from the scientific and more limited perspective of the various social sciences.

Many social scientists disagree with this point of view and would advocate the study of their respective disciplines as being the best training for students. They would argue that we are training children for a new century and that it is impossible to predict what type of behavior will be necessary to perform as a good citizen of the future (Berelson, 1962). Therefore, the intellectual pursuit of the social science disciplines is the best preparation for such an uncertain future. Moreover, morality and values are not taught directly but obliquely by example, contagion and reflection. We must not assume that we can develop good citizens through planned educational action.

King and Brownell and Scrivens contend that the interdisciplinarians attention to values and citizenship development ignore another aspect of values; the values implicit in intellect itself; knowing the structure



of the various disciplines; their languages; their methods and rationale in formulating their particular questions; and most important, the commitment to the advancement of scientific knowledge and truth which they promote. These values are of the highest intellectual order. They argue further that those devoted to the specialized pursuits of the disciplines are not inattentive to moral action. Rather their respect for moral action and their recognition of its complexity is the reason they deny simple solutions. "The intellectual heritage refuses to make men and their acts trivial, to debase men by indoctrination (King and Brownell, 1966, p. 146)."

So far three ideas have been developed. Interdisciplinarians support the improvement of the quality of beliefs about values that students have. Students must be appraised of the variety of values that exist and hence indoctrination plays no role in the interdisciplinary approach. And finally, that the study of the separate social science disciplines will not achieve interdisciplinary goals relative to values.

A fourth idea proposed by many writers relates to the potential of behavioral consequences of the seeming tendency toward earlier specialized studies and the subsequent effect on values.

Behavioral effects of specialization. Jarolimek (1967) claims that those who support an interdisciplinary approach to the social studies associate those studies with the behavior of citizens. Further, many authors like Jarolimek, Johnson, Hanna, Taba, and many others seem to imply that the progressive fragmentation of life may have serious consequences for children if we persist in disecting man for instructional



purposes. Hanna (1963) supports his wholistic approach by quoting eminent psychologists - Hebb and Pribam who feel that children are psychologically helped by Hanna's approach. Odegard demonstrates very similar concerns. He attributes the alienation that is characteristic of many of our children to just such fragmentation. This mounting sense of alienation in many cases produces a rejection of the social order and the value system which supports it. He warns that if we persist in this fragmentation that we run the risk of producing intellectual cripples locked in narrow cells doing things the significance of which they do not understand (Odegard, 1970, p. 177).

A similar concern is reflected in the working papers of the Atlantic Study Conference cited earlier. Gail and Charton (1968, p. 56) in their position paper stated that the interdisciplinary approach in education is particularly useful in training students as citizens and they further agreed with the commitment objectives supported by the conference, e.g. stress in the traditions and values of the Atlantic civilization. Such an emphasis is viewed as necessary because of the turbulent crises which developed among the Western nations in the 1960's such as civil strife in the United States and Viet Nam. Such crises could have possibly raised the question of the nature and significance of Western values and traditions (1968, p. 28). An interdisciplinary approach is viewed as a good method in accentuating these desirable values.

We can conclude that many authors support an interdisciplinary approach to the social studies because of a concern for youth and the values and behavior they may espouse if the specialized study of the social science disciplines is pursued without regard for mankind as a whole. Other writers discuss the difficulties inherent in elucidating



an agreed upon societal value structure.

Societal value structure. Tucker considers the question of values in the interdisciplinary approach from a specific viewpoint, e.g. overarching concepts and generalizations and their connection with the broader purposes of social studies education. Tucker claims that some interdisciplinarians are concerned "about the lack of a clearly defined and agreed upon societal value structure (Tucker, 1968, p. 92)." A similar concern is displayed by Price, Smith and Hickman (1965). Not only are they concerned about the lack of agreement in defining the societal value structure but they point to another area of conflict. The conflict between the values which students are taught in schools and those which they observe in practice in home, school and community. We know that one of the purposes of social studies education is to deal in some way with such value problems (Tucker, 1968, p. 92). What Tucker questions is how this can be done with the use of overarching social science concepts. Tucker concludes that the position on values proposed by interdisciplinarians needs further clarification.

Joyce (1967) develops a somewhat similar position to Tucker.

According to Joyce such a conflict of values has been engrained "historically in society as a whole (p. 48)," and it may be beyond the control of teachers. Joyce claims that in order to make intelligent decisions a teacher must understand his society and recognize that such conflicts exist and subsequently reconcile those differences to his own satisfaction.

What Joyce, Tucker, Price et al agree upon is the lack of a singular societal value structure. This presents a challenge to the teaching profession and to those who would use an interdisciplinary



approach. What is not clear, in these writer's opinions, is precisely how interdisciplinarians would resolve such dilemmas.

Summary

Interdisciplinarians view the central purpose of the social studies as the development in children of the attributes of good citizens and the improvement in the quality of beliefs they hold about values as these relate to the important areas of life. Students must be exposed to the notion that there exist a variety of values and, therefore, indoctrination is not a desirable feature of education. This aim of those who support an interdisciplinary approach may be accomplished by unifying the content of the social sciences and applying that content to the problems faced by individuals in our society. Experiences must be afforded students in examining beliefs systematically and holistically. Interdisciplinarians recognize the importance of the content and processes of the social sciences but not as primary objectives per se. The study of the separate disciplines in elementary schools is opposed because of dangers inherent in specialism such as the fragmentary view of man that is presented. This view could present opportunities for undesirable behavior outcomes and the taking on of undesirable value patterns by students. The lack of a clearly defined and agreed upon societal value structure is recognized and opponents of the interdisciplinary approach believe that content organized on an interdisciplinary basis cannot move beyond itself unless further clarification on its position on values is achieved.

As described, this theme suggests several questions:

1. What values do interdisciplinarians espouse?



- 2. What values are to be taught and on whose authority?
- 3. How do these values relate to the overall goals of social studies instruction?
- 4. In what way do overarching interdisciplinary concepts and generalizations relate to values?

Further comment will be made on these questions in Chapter V.

The Content of the Social Sciences

The social studies are based on the social sciences but they "clearly involve always a selection of and distillation from the social sciences (Engle, 1964, p. 381)." Many authors (for example, Scrivens, 1964; Hanna, 1963; Engle, 1963, 1965; Womack, 1966) have discussed the role that concepts and generalizations play in regard to the interdisciplinary approach to social studies. However, such a discussion about concepts and generalizations is plagued by a very basic problem the definition of terms. The term "concept" seems especially difficult to define and many authors merely substitute other words such as idea, principle, generalization, element (Smith, in Massialas, 1965, p. 36). Several authors have recognized this problem such as Platt (1963) and Massialas (1962). The position of these writers is given substance by viewing the terminology used by such writers as Jarolimek (1959) who uses the terms subject-matter, elements, ideas and Johnson (1956) ideas. This lack of a common language in the literature of social studies education is particularly important in considering this theme. The attention of the reader is directed to the Definition of Terms, Chapter I, where the terms concept and generalization have been defined.

In considering the theoretical literature surrounding the



interdisciplinary approach to the social studies, one question is continuously self-initiated and related to interdisciplinary relationships within the social sciences.

Interdisciplinary relationships within the social sciences. All of the writers presented in the review of the literature discussed the content of the social sciences in one context or another related to the interdisciplinary approach. Underlying this discussion was one basic and fundamental question: Are there indeed interdisciplinary relationships between the various social science disciplines? We know that the social sciences are the foundations of the social studies. Those who support an interdisciplinary approach to the social studies must believe that interdisciplinary relationships do exist between the social sciences. The procedure here is not to arrive at a unanimous conclusion regarding the question even though such a conclusion would indeed be supportive. Rather the intention is to sample the opinion of representative social scientists on this question.

Sherif and Sherif (1969) contend that there is a great deal of overlap in the subject matter considered by the social science disciplines. Not only do interdisciplinary relationships exist but indeed the disciplines need those relationships relative to the validity of the generalizations that the individual social sciences develop.

Campbell (1969) in the same volume, supports this position.

Kamarovsky (1957) presents a similar line of reasoning. However, Komarovsky uses a different term for interdisciplinary relationship, "interdisciplinary convergences". Komarovsky discusses three areas of such convergences and concludes that such issues cannot be wholly resolved but they can and should be clarified. "This may lead



to greater recognition of mutual dependence (1957, p. 22)." Odegard (1970) alludes to a similar idea "The interdependence of specialists upon one another is evident in every walk of life (p. 177)." Robert K. Merton suggests that what caustic literary historians once liked to describe as the "imperialism" of the social and psychological sciences, "in which each field lays claim to intellectual domains preempted by others.....no longer prevails (if indeed, it ever did) (Berelson, 1963, p. 253)."

Other writers disagree with these positions. Academicians such as Norton E. Long: B. W. Lewis; Oreston E. James; Gresham M. Sykes, for example (Berelson, 1962) in arguing for a much more thorough treatment of their respective discipline incorporated into the social studies program would not support Merton's position.

The premature closure of this issue regarding interdisciplinary relationships within the social sciences would be a disservice to scientific development. Such is not the intention of this thesis. Nevertheless, we may conclude that there exists theoretical support for that position among reputable social scientists. Consequently, there is foundation for an interdisciplinary approach to the social studies, as the social studies are based on the social sciences for which we have evidenced theoretical contention that interdisciplinary relationships do exist.

Many authors discuss the viability of using over-arching generalizations and concepts from the social sciences in the interdisciplinary approach to the social studies.



know that the interdisciplinary approach to the social studies is frequently identified with the use of generalizations that cut across the social science disciplines due in large respect to Paul Hanna and the California State Central Committee on Social Studies. Hanna believes that a child should achieve a unified or wholistic view of man. Johnson (1956) Odegard (1970), Jarolimek (1959) and Womack (1966) support Hanna's contention that the study of unrelated facts has little educational value. It is their interrelationships that are important if students are to perceive this wholistic view of man. Recognizing the incredible explosion of knowledge that students must contend with, Hanna (1962) supports the idea that it is impossible to remember all that information. "But they do remember generalizations derived for themselves (p. 88)."

The California Committee agreed with Hanna and developed generalizations of an interdisciplinary nature. These generalizations were not to be taught directly but rather the student must take an active part in discovering these generalizations. Womack states the same idea: "the teacher must restrain all tendencies to dictate the generalizations to the class rather than have the student discover them for himself (1966, p. 24)."

That over-arching generalizations play a vital role in the inter-disciplinary approach to the social studies is evident. What is fundamental to their development is that the student must derive these generalizations for himself. Interdisciplinarians, therefore, view the role of the student as an active participant in the learning process.

Fenton disagrees with Hanna and the California program. He feels as do King and Brownell (1966) that there are too many generalizations



developed by Hanna and the California program many of which are shallow and of dubious utility. A teacher can choose these generalizations at will and "no one can remember more than 3200 generalizations.....even though many are self-evident (Fenton, 1967, B, p. 13)." Further, the use of interdisciplinary generalizations does not promote the knowledge and use of the processes of the social sciences.

A review of the ideas presented by Hanna and Fenton indicate an apparent misconception of Hanna's philosophy. We know that Hanna supports the <u>discovery</u> of interdisciplinary generalizations by the student and therefore not their memorization as a means to acquiring a wholistic view of man. Fenton believes that such generalizations could tempt teachers to have their students memorize them as an end in themselves. Fenton views this as a useless process. Both writers are in agreement. Both recognize the futility of having students memorize generalizations. The potential dangers inherent in the operationalizing of Hanna's generalizations at the classroom level is really not the point. The fact remains that on this one point, at least, Hanna and Fenton are in agreement in their theoretical positions.

Phenix proposes a similar line of reasoning as do other critics of the interdisciplinary approach. Cross-disciplinary studies produce shallow non-disciplined thinking because of the mixture of methods and concepts (Phenix, p. 319). He recognizes the integrative nature of the disciplines but fears that the use of representative ideas or general concepts results in vacuous teaching. Children learn to repeat certain philosophical generalities about the various fields of study. Further, they would have no real understanding of the disciplines or of the general ideas they had learned.



Tucker agrees with Fenton and Phenix claiming that interdisciplinarians have not indicated clearly how their overarching concepts and generalizations can be operationalized at the classroom level. Tucker agrees with Fenton that these concepts and generalizations are so abstract that it is difficult to put them into the perspective of social studies education. "We know more about what such broad concepts and generalizations are not, than what they are (Tucker, 1968, p. 12)."

Taba agrees with Engle and Womack (1966) and assumes an opposite point of view and states emphatically that disciplined thinking can be achieved using an interdisciplinary approach. Taba believes that school subjects are but convenient categories of classification subject to change. She concludes "the objective of disciplined thinking about basic ideas does not eliminate the possibility of organizing the curriculum around ideas which cut across many disciplines.....(Taba, 1962, p. 271)." Taba's integrated curriculum uses not only concepts such as interdependence but generalizations from the various social sciences and facts (1967). The work of Taba indicates two conceptions:

- 1. that disciplined thinking can be achieved by using an interdisciplinary approach, and,
- 2. that in order to achieve this integrated view of man, concepts, generalizations and specific facts have a role in the overall scheme.

However, Taba along with Tucker (1968) recognizes that an integrated curriculum does present obstacles. It is more difficult to plan adequately and to teach competently.

So far several ideas have been developed. There is theoretical foundation supporting the interdisciplinary approach to the social



studies. The viability of interdisciplinary generalizations is subject to much debate. But, disciplined thinking can be achieved using an interdisciplinary approach provided sophisticated knowledge is acquired by a teacher to implement it. A fourth idea developed by writers is the concern for structure in the interdisciplinary approach.

The concern for structure. The concern for structure reflects the ideas of Bruner (1963). That structure is important is recognized by most writers. How interdisciplinarians view the structure of the social sciences is subject to considerable debate. We have seen that Fenton disagrees with the position of Paul Hanna. This disagreement is centered primarily in what Fenton interprets as Hanna's conception of the social sciences. "A number of workers, most notably Hanna.....seem to have identified the structure of the social studies.....as a list of generalizations....." and "the scheme's principal fault lies in its conception of the social sciences: they become primarily a body of known generalizations rather than a process of inquiry (Fenton, 1967A p. 52)." Fenton recognizes that lists of generalizations are one way of thinking about structure. These generalizations do define the investigated subject matter and direct its inquiries. But "they just don't do either task very well (Fenton, 1967A, p. 52)." King and Brownell (1966) and Scriven (1967; 1964) reflect the same criticism. Fenton (1968) concludes that "most of the directors of the social studies curriculum projects.....have abandoned generalizations as a satisfactory guide to structure (p. 77). Fenton (1967) suggests that "lists of concepts form a more useful notion of structure than lists of generalizations (p. 14)."

Womack presents a different theoretical position from that of



Fenton and supports the work of Hanna, Engle, the California Program and others who have set down the major principles of the social sciences. He contends that the interdisciplinary approach to generalizations has met a warm reception from the informed social studies teacher. This approach assists the teacher "in having students discover for themselves the underlying structure of the social sciences (Womack, 1966, Introd.)."

It is clear, therefore, that there is theoretical support for the belief that interdisciplinarians view the structure of the social sciences as lists of carefully selected generalizations. However, this is not the one and only view of structure that interdisciplinarians espouse. Patrick claims that the best of the new ideas call for interdisciplinary studies taught in terms of structure and the discovery method (1966, p. 36)." Patrick further delimits his concept of structure as "combining elements from the humanities, social sciences and history to create a new and unique discipline (1966, p. 25)."

Patrick expands his use of the term "elements" as including "the most important concepts and generalizations and the most significant facts which are pertinent to them.....(1966, p. 26)." In a similar way Taba (1967) has used overarching concepts, generalizations and facts as the structure in her integrated program.

What appears to be suggested here is that interdisciplinarians entertain a dual view of the conceptual structure of the social sciences. The first consists of lists of carefully chosen generalizations, the second embraces a more inclusive view.

However, interdisciplinarians recognize that structure includes more than its conceptual component. Structure also includes the method



by which a discipline arrives at its conclusions or in Schwabs (1964) term, its syntactical structure. Hanna (1963) recognizes the importance of this syntactical component. Patrick (1966) claims that we must "instruct students in a process by which they can gain proficiency...
..(p. 26)." Similarly, Fenton (1966) illustrates that Engle of Indiana also has worked to develop this syntactical aspect of structure. Womack (1966) also illustrates this concern shared by interdisciplinarians. This aspect of structure will be discussed in relation to a separate theme, the processes of the social sciences.

Summary

There is theoretical support among some social scientists sustaining the rationale for an interdisciplinary approach. This approach is frequently associated with the use of generalizations that cut across the social science disciplines. These generalizations are not to be memorized but rather interdisciplinarians believe that the student must derive these generalizations for himself. Thus, the student is viewed as an active inquirer in the learning process. As such, the study of unrelated facts is viewed as being of little educational value.

The utility of these generalizations is subject to much debate but interdisciplinarians believe that disciplined thinking can be achieved through the use of concepts and generalizations that cut across the disciplines. Further clarification regarding what these concepts and generalizations are is considered desirable to implementation. Further refining of the "what" of these concepts and generalizations may clarify the approach. It is generally accepted that a teacher with a more sophisticated knowledge of the content and process of the social sciences



is required to implement the approach.

Interdisciplinarians view the conceptual structure of the disciplines from dual positions. One position equates the conceptual structure with generalizations that cut across the social science disciplines while the other position recognizes a more encompassing structure which additionally embraces overarching concepts and specific facts carefully selected to develop the more abstract concepts and generalizations.

Interdisciplinarians recognize the importance of the syntactical structure of the disciplines and are strong advocates of its inclusion as a dominant element in the approach.

The Process of the Social Sciences

All authors, whether they supported the interdisciplinary approach to the social studies or not, agree on one major proposition. There must be a greater infusion not only of the basic content but equally important of the processes of the social science disciplines into the social studies strand of the curriculum. Hanna recognizes that each of the social sciences has special ways of viewing the common field of men living in society, nevertheless, he supports generalizing about the total cultural patterns rather than concentrating on the separate social science disciplines. "We hasten to say as forcefully as possible that the above does not argue for the rejection or neglect in the elementary school social studies program of the content and processes as isolated and structured by the social scientist (Hanna, 1963, p. 192)." We can conclude that in Hanna's views and others who support Hanna's ideas (for example, Womack, 1966; Engle, 1963, 1965) the use of interdisciplinary generalizations in social studies instruction does not preclude the possibility of acquainting



students with the processes of the social science disciplines. Indeed, this is an important instructional objective.

Not only do writers discuss the importance of process relative to the interdisciplinary approach but a great deal of discussion centers around the question of whether or not there exist processes that cut across the various social science disciplines.

Interdisciplinary processes within the social sciences. Bellack (1964) and Joyce (1965) agree with Hanna that the processes of the social sciences are an important component of instruction. Bellack believes that for a comprehensive view of man the specialized perspectives of all the social science disciplines are needed. This plurality of methods, characteristic of the social sciences, have been developed by the respective scientists to deal with problems within their individual spheres. The modes of thinking and analysis differ from field to field. At the same time Bellack states that there are interconnections among the social sciences. Various social scientists do borrow from each other when it comes to both concepts and methods. He gives us an example: Political scientists interested in political socialization get their methods from behavioral scientists and seem to be more closely related to sociologists and social psychologists than to fellow political scientists (Bellack, 1964, p. 272).

Komarovsky alludes to the same idea, using Lazarfeld's term "adjacent dilenttantism" and remarks,

.....certain procedures are used by a variety of social sciences. But in one discipline they are used competently and in another in a dilettante way.....Sociologists and social psychologists, for instance, have developed detailed skills in the writing of questionnaires. Economists, when they



use questionnaires, often do so with.....
naivete. Historians use haphazard quotations
from newspapers without any awareness of
modern content analysis techniques.....
(Komarovsky, 1957, p. 29).

Komarovsky (1957) recognizes that "ignorance is.....the major problem in this case (p. 29)" Komarovsky concludes that the essays by Lazarsfeld (1955, p. 3 bib.) David (1955) and the monograph by Planck contain "many references to this mode of convergence with regard to history and sociology while Katona and Klein illustrate the same in the application of survey research to economics (1957, p. 30)." Sherif and Sherif (1969) lend their support to the foregoing theoretical positions "significant methodological differences do not follow the disciplinary boundaries but cut across them (p. 87)." These processes are identified as symbolic interaction, systems theoretic and ethnomethodology. These interdisciplinary processes could have implications for educational instruction.

The education literature is replete with concern for introducing efficiency into the instruction process. We must make teachers more efficient. Many reasons are offered, two repeatedly: the explosion of knowledge and the economic situation (Drucker, 1969; Parker and Rubin, 1966, p. 64). It could be contended that if indeed these interdisciplinary processes are legitimate processes and if teachers can be instructed in the skillful use of such processes, educational benefits could acrue in the area of economy and efficiency. Instructing students in the use of three processes is more efficient and economical than instructing students in the use of seven separate processes.

Some authors reject the notion of interdisciplinary processes.

Schwab (1967) states that the two components of structure "the conceptual and the syntactical - are different in different disciplines (p. 56)."



Senesh (1966); Fenton (1967) and Berelson (1963) support Schwab's contention. However, Berelson (1963) qualifies his statement that "eachdiscipline has acquired its own array of tools and methods (p. 261)" and says that "there are, of course, tools and methods that are not confined to studies on the one scale or the other; these cut across the various fields of behavioral science (1963, p. 265)." Berelson identifies these as mathematics, the logic and practice of sampling, the use of statistical analysis etc. It is clear, therefore, that Berelson does not refer to "core" processes as proposed by Sherif and Sherif.

So far two ideas have been presented. First, interdisciplinarians do recognize the importance of including the processes of the social science disciplines in their approach to the social studies. Second, the idea that interdisciplinary processes do in fact exist has been proposed. A third idea evolves out of the concern for disciplined thinking and how this can be achieved by using the processes of the social sciences in the interdisciplinary approach.

Process implications for disciplined thinking. Womack (1966) claims that "an integral part of the interdisciplinary approach is the skill and techniques of the social sciences. Skills and techniques are not to be left to haphazard chance.....(p. 52)." Womack asserts that these processes must be specifically identified and taught in each unit of study. However, Womack indicates a further dimension to his concept of "process,"

The interdisciplinary approach asserts that the social studies teacher, must devote classroom instructional time to developing the ability of students to use the skills of the field, and this should be a continuing phase of the entire course.....(1966, p. 52).



It is clear then that those who support an interdisciplinary approach to the social studies view the concept of process on two distinct but inseparable levels. On one level there exists the general skills necessary to carry out a social study and on the second level there are the processes and techniques of the various social sciences. Attention to both levels of process skills must be an integral part of the interdisciplinary approach to the social studies.

Other writers present similar positions to the above. (1967), is explicitly concerned with achieving disciplined thinking and in addition to the processes of the social sciences would include specific techniques and strategies to achieve this end. Parker and Rubin (1966) affirm that "process ought to be central, but not the exclusive course to acquiring information (p. 63)." They would support eclectism in learning recognizing that when the behavior of people doing things is studied, compartmentalization is artificial. Thus, they would include not only the intake, manipulative and applicative operations but not neglect the process of the social sciences in interdisciplinary learning. Odegard (1970), says: "Elementary teachers must perforce transmit and coordinate the information, concepts, structure, and methods of the sociologist, economist, geographer.....(p. 119)." Similarly, many position papers presented at the Atlantic Studies Conference (1966) call for the need to include the strategies and perspectives of the various social sciences to achieve disciplined thinking so necessary to students. Engle (1965, p. 12) supports Hanna's (1963, p. 192) view regarding the importance of the process skills of the social sciences but feels that adding together the separate methodologies of the disciplines will not promote a comprehensive view of content.



Phenix (1964) contends that the processes of the social sciences are far more important than learning about the particular products of any investigation carried out by the social scientists. "It is more important for the student to become skillful in the ways of knowing (p. 11)." Phenix suggests that "interdisciplinary studies, such as programs combining the social sciences.....are not so favorable to the teaching of methods (1964, p. 340)." What Phenix is pointing to is the fact that no clue is provided by the subject matter itself as to the methods appropriate to the composite inquiry. Jarolimek (1959, pp. 219 - 221) suggests the very same difficulty facing those teachers who would undertake an interdisciplinary inquiry. King and Brownell (1966) agree with Phenix and Scriven (1964) that each discipline should retain its unique method of inquiry, "the minute you merge them, you get a smudge from which very little emerges (p. 95)."

Summary

Those who support an interdisciplinary approach to social studies recognize the importance of including the processes of the social sciences in their approach. The use of concepts and generalizations that cut across the social sciences does not reduce the attainment of this objective. The pluralism of the social sciences is recognized. Modes of thinking and analysis can differ. At the same time, there is theoretical support for the position that there are processes common to the social sciences. These processes that cut across the various social sciences are termed here, for discussion purposes interdisciplinary processes. These processes may have utility within the instructional arena. The concept of "process" in the interdisciplinary



approach was seen to have double elements; one, the general techniques needed to carry out any study and two, the methods of the various social sciences. Both these components of process are necessary elements in developing disciplined thinking in an interdisciplinary approach. Those who disagree with the approach feel that disciplined thinking can be achieved only by concentrating on the analytical simplicity afforded by the individual disciplines.

This theme as presented suggests the following questions:

- 1. Are the interdisciplinary processes legitimate, intellectual processes?
- 2. Do they cut across the various social science disciplines?
- 3. Are they teachable? that is, can teachers be instructed
 - a) to identify and use them?
 - b) to transmit them to their students?
- 4. What advantages are there to the use of interdisciplinary processes as opposed to traditional methods or processes?
- 5. Will they contribute to,
 - a) the aims and objectives of social studies education?
 - b) the goals supported by the interdisciplinary approach to the social studies?

and one final question of a somewhat different nature,

6. If a teacher decides to use an interdisciplinary approach to a particular piece of content, how will that teacher know which processes of what social sciences disciplines will best illuminate that content?



The "How" of the Interdisciplinary Approach

Teaching must involve both inductive and deductive procedures.

Inductive reasoning moves from the specific to the general while deductive reasoning is the reverse, starting with the general and moving to specifics. Inductive thinking begins with an examination of specific examples, facts, situations and tries to discover a broader abstraction that can integrate them. Deductive reasoning is the process of verifying or applying a concept or generalization. For example, children may be given a generalization and asked to provide data that will substantiate it, or they may use the concept or generalization to explain new situations. It is apparent that different forms of cognition are required. Inductive thinking relies on analysis and synthesis of data while deductive thinking calls for application and evaluation. "To account for all types of cognitive objectives, it is necessary to use a combined inductive-deductive approach (Estevan, 1968, p. 264)."

Inductive Orientation. With this foregoing statement supporting the theoretical literature, it becomes evident that the interdisciplinary approach to the social studies is primarily inductive in orientation using a deductive approach where necessary to achieve overall goals. As previously discussed, Hanna developed generalizations because a student tends to remember "sound generalizations that he has derived for himself (Hanna and Lee, 1962, p. 88)." This statement illustrates one aspect of Hanna's theory. Children are not to be given generalizations to memorize, verify or apply, certainly not initially. Rather with the use of facts and concepts, at the deductive level, they are to derive these generalizations for themselves. Clearly an inductive process.



Similar positions are presented by Parker and Rubin (1966) and Womack (1966). In his model units demonstrating the interdisciplinary approach Womack suggests beginning with a descriptive statement, an example or a situation and by using particular social science disciplines move through a series of steps designed to have the student discover the particular generalization chosen. Obviously, there will be times where deductive reasoning is required. In this approach, the student will learn a mass of facts but "the student should attempt now to disover if there are any generalizations which can be made concerning man and society (Womack, 1966, p. 64)." Synthesis plays a role in this approach as inferior generalizations may be synthesized into a substantial one.

King and Brownell and Scriven disagree. They believe that inter-disciplinary generalizations are valueless because of the strong temptation afforded teachers to have students memorize them. King and Brownell would view the approach as a totally deductive process. What may happen at the operational level is not the question in point. We are looking here at theoretical positions. It could be contended that King and Brownell and Scriven and others whose position they represent, have opposed the interdisciplinary approach based on their preconceived ideas of what will happen at the operational level rather than dealing with the theoretical positions as espoused by Hanna and other interdisciplinarians.

It appears that the interdisciplinary approach to the social studies is primarily inductive in its approach to content but what process is used to organize and operationalize this content is not agreed upon. Several operational definitions are put forth by various theorists regarding the interdisciplinary approach which further clarifies its operational aspects.



Processes of Organization. Gail and Charton (1968) in discussing the interdisciplinary approach assert that above all, the approach must be an integrated one. They attempt an operational definition in this manner: "Interdisciplinary forms of teaching are those involving several disciplines in a joint effort to recreate the complexity of real situations (p. 55)." A similar definition is presented by Womack (1966), "an interdisciplinary approach refers to the concurrent use of two or more social science disciplines to study the same content (p. 47)." What these definitions appear to suggest is the following type of preliminary organization by a teacher. The teacher, either singly or together with students, selects a problem or a piece of content for study. The teacher then scans the social science disciplines to determine what knowledge from these disciplines can bring the objective into clearer perspective for the student. These concepts and generalizations having been thus selected, the teacher devises a pattern of organization to ensure that these will be integrated into the curriculum. The content of the various social sciences deemed relevant to this study will be included but the respective disciplines will not be in evidence as history, anthropology, or whatever, or to use the words of Michaelis (1968), "the disciplines are indistinguishable (p. 136)."

Other writers present similar ideas through the use of different terminology. In defining the interdisciplinary approach King and Brownell use the terms, crossing, fusing, bridging or surpassing known disciplines (1966, p. 144). In a somewhat similar manner, Jarolimek (1959), defines the unified or interdisciplinary approach as the "fusion of subject matter from two or more fields of knowledge into a single, unified program (p. 3)." Fenton (1967) also uses the term "fusion" in reference to the



interdisciplinary approach. This use of the word fusion or fusing is significant. Webster's (1966, p. 589) defines fusion as "the union of different things....." We might speculate that in fusing concepts from the social science disciplines, one would select certain of the concepts as set out by these particular disciplines and unite them to study a piece of content. But it must be noted that King and Brownell have not only used the term fusing. They have also used the terms surpassing, crossing. Similarly Taba uses the terms "overarching ideas (1962, p. 191)" and also "ideas that cut across many disciplines (1962, p. 270)."

It could be contended that a rather different concept is implicit in using ideas that cut across the disciplines than by fusing ideas. If we consider this suggestion in terms of the structure of the disciplines, perhaps clarification will ensue.

In the first instance when you are fusing concepts from the disciplines, concepts are selected from the structure of several disciplines as these structures were developed by the specialized areas of inquiry. The concepts are fused or united, without their respective disciplines being in view, and this knowledge is applied in an integrated manner to a piece of content under study. In the second instance, when you use ideas that cut across many disciplines, you are not basically concerned with the structure of the individual disciplines but rather you are looking for the interdisciplinary concepts that indeed go beyond the structure of the disciplines.

Understanding of these ideas is very important to a more precise comprehension of the interdisciplinary approach to the social studies. What emerges is two distinct processes within the interdisciplinary



approach. Using one method the teacher would select concepts from the structure of the disciplines as these appear to illuminate her objective and integrate these concepts and apply them to the study at hand. Using the other method, the teacher must go beyond the structure and attempt to discover concepts that cut across the disciplines and apply these to the study in question. In the first instance, a teacher who knows the structure of the disciplines could proceed fairly simply. In the second approach, a more sophisticated knowledge is required.

Thus far two ideas have been developed: that the interdisciplinary approach to social studies is inductive in its general orientation, and that there exists two distinct operational processes for selection of content possible within the approach.

A third idea proposed by many theorists is that the interdisciplinary approach to the social studies is a problem-centered approach.

A Problem-Centered Approach. Almost all theorists discussing the interdisciplinary approach to the social studies demonstrates a concern for the problems of children and youth. The general consensus of opinion among interdisciplinarians indicates that problems do not come neatly labelled sociological or economic. In order to provide the student with a comprehensive view of any social problem, the knowledge of all the social science disciplines is needed.

The term "problem" enjoys a rather broad interpretation. It is not the concern of this thesis to resolve the dilemma of what constitutes a problem. Mayer (1964) and Welden (1955) have speculated on this difficulty. The indication here is that considerable latitude was taken in regard to the term "problem" by the writers.



Engle (1965) states that interdisciplinarians intermingle know-ledge from all of the social science disciplines and "deal directly with social ideas and problems as these occur to the average citizen (p. 1)". Engle, himself, developed nine basic ideas which correspond roughly to the principal areas of persistent social problems which he believed should receive recurring emphasis in the social studies. We can conclude then that the problem-solving process is a central process in social studies instruction for Engle.

Other writers, like Engle, associate the interdisciplinary approach to the social studies, with problem-centeredness. Michaelis (1968) claims that unified or interdisciplinary approaches may be found in units dealing with contemporary problems that require knowledge from several disciplines. Jarolimek (1959) claimed that interdisciplinary studies represent a more "realistic approach to the understanding to today's complex problems (p. 2)." Sherif and Sherif in speculating why people are viewing interdisciplinary approaches more favorably is that the sheer complexity of the forces bearing upon any social problem makes it highly unlikely that understanding the contributions of any one discipline can be obtained without considering the insights to be gained on the same problem from various other discipline standpoints. King and Brownell question the validity of this philosophy that we must use a wide array of disciplines in problem resolution (1966, p. 147).

Tucker supports the latter position and comments that the lack of any systematic way of selecting problems and organizing the problems to avoid useless repetition is essential. Recognizing that Engle's work foreshadowed these criticisms, Tucker concludes that while Engle's scheme holds forth some promise for the organization of these



problems, the plan remains heuristic and not operational.

Many writers such as Michaelis (1968), and Gail and Charton (1968), qualified the term "problem" and used the additive contemporary or real. The conclusion one could draw is that not only is the interdisciplinary approach to the social studies a problem-centered approach but further that these problems must be relevant to the needs of the child and the times in which we live.

Milgram contends that "to say a problem is treated in an interdisciplinary fashion can mean a number of different things (1969, p. 103)" but to Milgram the criteria is the exact point in the process of inquiry that interdisciplinary thinking is introduced. Milgram recognizes that such thinking can be introduced at any point from the formulation of a problem through to the applicative phase. However, he asserts that the earlier in the research that interdisciplinary thinking is introduced, the more likely that intellectual benefit will accrue. What Milgram and many other writers are pointing to is the importance of better planning of instruction in the interdisciplinary approach if intellectual rigor is to be achieved by the students.

Many writers recognize that three influences are presently stimulating the interest if not the actual integration of the disciplines themselves. First, social scientists are being asked to cope with problems of new magnitude. To put man on the moon, for example, calls for the talents from more than one discipline. Secondly, as the various disciplines mature, their efforts to elaborate their basic systems of ideas tend to break down sharp divisions among the various specializations. Third, work in the social sciences is becoming less exclusively academic than it was a few decades ago. As a result of these influences, scholars



are more inclined to see a need for dealing with larger segments of know-ledge than is contained in any one discipline. For the same reasons, these influences are being felt by the classroom teacher in the elementary school. But how, indeed, if one proposes to use an interdisciplinary approach, do you organize the content of the program?

We know that in using the interdisciplinary approach it is possible to organize content into units of work. For example, Hanna's basic human activities are developed into units for study. Womack (1966) and Taba (1967) to name only two theorists suggest a similar pattern to the teacher. Further, we have seen that even Phenix who is a critic of the interdisciplinary approach, agrees that intellectual rigor can occur if a reasonable pattern of organization underlies the approach. Consequently, a teachers who would engage students in a study of Slavery, for example, and decide to take an interdisciplinary approach, could consider the possibility of organizing the study into a unit of three or four weeks duration. The possible organization of the material in an interdisciplinary social study into units of work is another dimension of the "how" of the approach.

Summary

The interdisciplinary approach is primarily inductive in orientation, using facts, concepts or other content at the deductive level to arrive at a better understanding of broader generalizations or to acquire a comprehensive view of a piece of content. The belief of critics of the approach that it is deductive in nature is mistaken. It is recognized that both inductive and deductive procedures are necessary in instruction but that too heavy a reliance has been placed on the deductive processes.



Consequently, the inductive nature of the interdisiplinary approach can be viewed as one of its strengths. Theorists who support an interdisciplinary approach to the social studies demonstrate a continuing interest in the problems of students. The study of these problems should be included in instruction and be related to the contemporary needs of students as they face real life situations. An analysis of representative operational definitions of the approach initiate the possibility that two distinct procedures are inherent within it. The first method involves the selection of particular concepts from the structure of the social science disciplines and these are integrated for the purpose of studying a selected piece of content. The second method involves a more sophisticated scanning of the disciplines to determine certain concepts and generalizations that go beyond the structure of the individual disciplines. These concepts or generalizations may be termed concepts or generalizations that cut across the social sciences or interdisciplinary concepts and generalizations. The conceptual structure of the disciplines is supportive in the first method and seemingly irrelevant in the second. A teacher who would consider using an interdisciplinary approach in social studies must recognize the basic need for careful planning and that organizing material into units of work is one possibility.

This theme as presented suggests the following questions:

- 1. How would interdisciplinarians define the term "problem"?
- 2. How can problems of interest to students be selected to accommodate the aims and objectives of social studies instruction as well as those of the interdisciplinary approach?



A Synthesis: Definition and Description of the Interdisciplinary Approach to The Social Studies

The interdisciplinary approach to the social studies refers to an eclectic method of selecting and organizing content from two or more of the social science disciplines for simultaneous application to a social study. The content appears to consist of:

- 1. interdisciplinary concepts and generalizations that go beyond the structure of the individual social science disciplines and that are integrated for the purpose of instruction, and/or
- 2. concepts and generalizations selected from the structure of the various social science disciplines and integrated for instructional purposes.

An important operational word, then, appears to be integration. Because of the enormous amount of content available from the social sciences and due to the dynamism of its nature, synthesis is one of the most outstanding features of the approach. An integral component of the interdisciplinary approach is attention to the processes of the various social science disciplines. These processes must be specifically identified and taught in each unit of study. Further, the interdisciplinary approach advocates instruction in and refining of the general processes such as locating, selecting and organizing of information. Process then, both at the level of the processes of the social science disciplines as well as general process skills, represent an extremely important element in the interdisciplinary approach and classroom time must be allocated to their development.

The interdisciplinary approach to the social studies reflects a common concern regarding the explosion of knowledge and the impact that such dynamism suggests for classroom instruction. The increased



specialism within society as a whole together with the increasing tendency toward the earlier introduction of the individual disciplines into the school curriculum is regarded with a degree of skepticism. This fragmentation of life pursued by the study of the separate disciplines is viewed with apprehensiveness for two reasons. Interdisciplinarians believe that children are psychologically helped by having students begin their study by viewing content as a total entity where all of its interrelationships may be explored to better comprehend the whole. The detailed analysis and bisection of content that is provided by the specialist disciplines does not provide a comprehensive wholistic picture. That interdisciplinarians do not recognize the value in specialized study must not be assumed. But students must begin, as in Social Studies, with the study of man as a whole. This will make later specialized studies of the varying aspects of man more meaningful. One purpose, then, of the interdisciplinary approach to the social studies is to provide the student with a wholistic, comprehensive view of content by underscoring the interrelationships of all the social science disciplines. The interrelationship of knowledge, particularly that knowledge especially designed to study man in all his various aspects, the social sciences, is considered to be a good tool to enable students to achieve such a comprehensive view.

Secondly, the fragmentation of man provided by separate and isolated studies, for example, economic man, may contribute to the general alienation displayed by youth in modern day society. Ecompassed by an ever expanding and demanding megalopolic environment, youth may not be able to understand itself in relationship to such a structure. Due to this increased emphasis on specialization, with its narrow perspective, youth feels alienated, alone and unfulfilled. Further the many turbulent crises that



have plagued democratic societies, especially from the 1960's, have had some impetus. The values and ideals that have traditionally upheld the democratic way of life appear to be challenged.

Interdisciplinarians recognize that values and citizenship development are an integral part of education in general but those who support the interdisciplinary approach believe that the social studies has a particular role to play in this regard. Values and citizenship development are, therefore, a primary concern to those of interdisciplinary persuasion. Students must be provided direct experience in examining these beliefs but they must also be exposed to their diversity, complexity and competitiveness within society. Additionally, the interdisciplinary approach to the social studies supports attempting to improve the quality of beliefs about values that students hold. This concern for values has several implications:

- 1. It must be recognized that the area of values is a sensitive one. As such, a teacher must be skilled in the techniques of dealing with such issues. This is important to enable students to analyse values which may have been internalized without due consideration or indeed to develop a system of values with which they are happy. Finally, to enable a student to analyse and discuss important value issues, a particular type of environment must be created to foster such frank and open discussion.
- 2. Recognizing that a clearly defined and unanimously accepted value system does not exist, the position can be assumed that the question of values may be an individual, personal affair, the product of our experience. Sufficient latitude must be built into the teaching strategy to take recognition of this variation.



- 3. The interdisciplinary approach contends that values must be taught systematically and provision must be made to give students direct experience about values. It could be contended that to accomplish such an objective, an instructor must consciously examine his own value system, be prepared to state it but at the same time provide the student with all the degrees of freedom to make his own ultimate choice.
- 4. Interdisciplinarians do not support indoctrination.

The interdisciplinary approach to the social studies advances a strong concern for disciplined thinking. One method of achieving this goal is by a very careful attention to the selection of the concepts and generalizations to be used. While the approach is frequently identified with the use of interdisciplinary concepts or generalizations, these do not appear to be its only source of content. Concepts, generalizations and facts from the structure of the disciplines all have a place in this eclectic approach. The teaching of isolated facts has no educational value nor do interdisciplinarians support the memorization of generalizations. Rather, the student must actively discover these generalizations for himself, if indeed, they are to have any enduring value. The role of the student, from an interdisciplinary point of view, is as an active participant in the learning process. Further, the processes of the social sciences, considered to be of paramount importance, will aid the student in achieving disciplined thinking. As such, the interdisciplinary approach to the social studies is an inductive approach. As presented thus far, it would seem that an instructor using the interdisciplinary approach to the social studies would have to have the following skills:



- 1. A thorough knowledge of the structure of the social science disciplines. Such a knowledge must encompass not only the conceptual structure but also the syntactical structure.
- 2. Skills in the use of the processes of the social science disciplines.
- 3. Skills in techniques aimed at concept and generalization development, that is, in the realm of cognitive development.
- 4. The ability to perceive and make students aware of the importance of the interrelationships of concepts in the structures of the various disciplines.
- 5. The ability to perceive the role of a teacher as a guide to learning and not that of the transmitter of knowledge.
- 6. Expertise in planning and organizing techniques.

In brief, a teacher who would use the interdisciplinary approach to the social studies must be a 'master' teacher.

The interdisciplinary approach to the social studies is vitally concerned with contemporary problems as these are experienced by the ordinary citizen. Because such problems are extremely complex, they require the knowledge of all the social science disciplines to deal with them in a more realistic manner. The interdisciplinary approach seeks to restructure and unify the content of the social science disciplines and apply this knowledge to the problem under study to obtain a comprehensive view of that problem. Those who support an interdisciplinary approach to the social studies contend that the social sciences are all studying various aspects of one entity, man, and for a comprehensive picture of man the overall perspectives of all the social science disciplines are required.



Finally, interdisciplinarians would agree with McMurrin that,

The basic principle that must be respected and that is clearly in danger of serious violation, is that a child is not a man in miniature, and the educational program, however much it must prepare him for adult life, should respect his childhood, and should respect the adolescence of youth, just as it respects the maturity of adults (1964, p. 207).



CHAPTER V

PERSPECTIVES ON THE INTERDISCIPLINARY APPROACH TO THE SOCIAL STUDIES

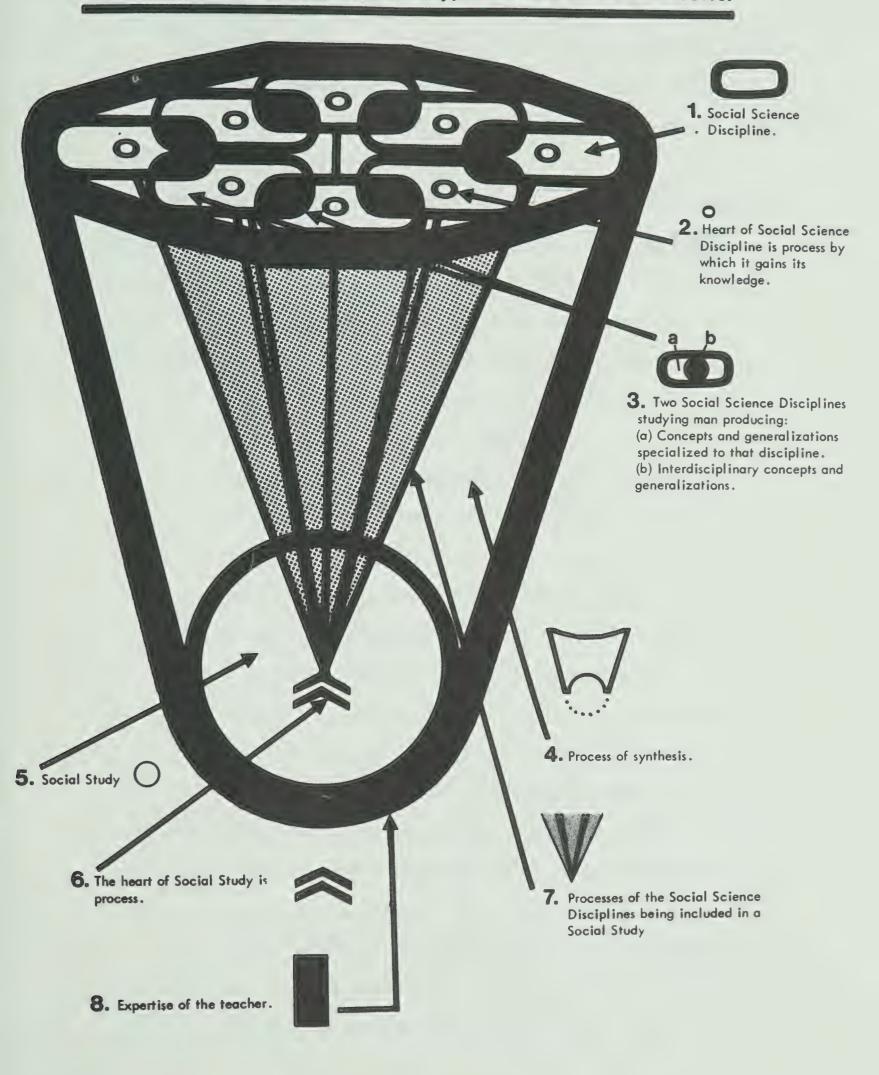
It was indicated previously that the writer shares the view of Massialas and Smith (1965) and other theorists that research should contribute to the building of a systematic body of social studies theory. Because of this belief, this thesis was undertaken. The literature has now been reviewed and a synthesis of the interdisciplinary approach has been developed.

The writer presents the view that the interdisciplinary approach to the social studies can be an intellectually rigorous and scholarly approach to the social studies. Some theorists question this belief. Scriven (1964) in contrasting multi-disciplinary and inter-disciplinary approaches criticizes the latter stating, "Don't attempt to give the whole treatment as a homogenized hodgepodge; nothing valuable comes out of that(pp. 94 - 95)." In another context, Tucker (1968) discussing interdisciplinary concepts and generalizations states that "we know more about what such broad concepts and generalizations are not, than what they are (p. 92)." Comments such as those are representative of many critics of the interdisciplinary approach.

Consequently, this chapter is designed to clarify further the theory presented in Chapter IV. Model I attempts to incorporate the components of the synthesis to illustrate the approach and perhaps to respond to Tucker's question. The second part of the chapter attempts to deal with the criticism of Scriven by offering perspectives on the interdisciplinary approach to the social studies in behavioral terms concentrating on the multi-faceted concept of process as it applies to this approach.



Interdisciplinary Social Study, Process and Content.





I. An Interdisciplinary Model

The interdisciplinary approach is defined as an eclectic method of selecting and organizing content from two or more of the social science disciplines for a simultaneous application to a social study. Model I attempts to illustrate this.

The top of the conical model illustrates the interdisciplinary conception of the social sciences studying man. Each represents a particular social science and the heart of each social science is the process through which that science gains its knowledge. These social sciences are in continual dynamic interaction with each other. The products of the social sciences studying man appear to have two major components.

- a. Concepts and generalizations that are indigenous to the particular disciplines and that form an integral part of their conceptual structure. Example: the concepts of unlimited wants and limited resources are associated with the structure of economics. No other social science discipline studies this concept in the manner of the economist. Indeed unlimited wants and limited resources are lead concepts which serve to explain others in one structure of that discipline (Senesh, 1966).
- b. Interdisciplinary concepts and generalizations. These concepts and generalizations represent the convergences of the various disciplines as they study the many dimensions of man. Because of the dynamic interaction of these disciplines any of these social science disciplines may converge in such a manner to arrive at interdisciplinary concepts and



generalizations. An example of such a convergence would be an anthropological and a sociological study which has resulted in the concept of culture. Culture is considered to be an integral part of the conceptual structure of both the disciplines of Anthropology and Sociology. Consequently, culture could be termed an interdisciplinary concept.

It is recognized that the b. areas representing the interdisciplinary concepts and generalizations are not static. Indeed these areas change with advancement in knowledge. Also, some interdisciplinarians would argue that the b. areas are very much larger attesting to their belief that interdisciplinary relationships within the social science disciplines are a major component of their make-up. The writer acknowledges the difficulty 1) to illustrate dynamism and 2) to arbitrate in the area of degree of size regarding convergences. The reader must recognize that these boundaries are flexible and that the degree of their size is academically debatable. Nevertheless, the concept presented here is still valid.

An instructor in selecting and organizing content for an interdisciplinary study may select from these two components as these seem to be best suited to a particular social study. However, the interdisciplinary approach to the social studies is also vitally concerned with process.

Knowledge is more dynamic than process and hence the heart of the social sciences are the processes of these sciences, the processes through which knowledge is derived. The interdisciplinary approach to



the social studies strongly advocates incorporating not only more of the content of the social sciences but perhaps most importantly the processes of these disciplines. Consequently Model I attempts to illustrate this by drawing process lines from the heart of the disciplines to the social study itself. The process lines indicate the range of selection that is available to the teacher, e.g. the teacher must choose from among these processes, those processes that will assist students in carrying out their social study. Together with these processes, the general processes necessary to carry out a social study must also be specifically identified and classroom instructional time provided for their development and refinement. These general process skills will be considered in more detail in Part II of this chapter.

The vast amount of content available from the social science disciplines together with their processes represent a substantial part of the universe from which a teacher may select to carry out any particular social study. The selection from this universe and its subsequent synthesis is carried out by the teacher until a meaningful and manageable social study is constructed.

From the foregoing, two ideas are apparent:

- 1. Synthesis is an outstanding feature of the approach.
- 2. An interdisciplinary social study is very strongly influenced by the expertise of the teacher who must translate the content and processes of the disciplines into a meaningful social study in order to achieve a comprehensive view of man.

However, one question is suggested and deserves comment. Does the interdisciplinary approach to the social studies exclude the use of literature, mathematics, to name but two subject areas often included



in a social study? The answer is, of course, no! The interdisciplinary approach to the social studies is only one approach to that subject area and as with any social study a teacher would incorporate literature, the skills of mathematics to facilitate any social study. However, the theory upon which this model is based attended to particular aspects of the approach. Consequently, as this model is developed upon that theory, the model incorporates the components of the theory as delineated by the writers chosen for study.

Summary - Part I

So far several ideas have been illustrated through the use of Model I. Interdisciplinarians view the social sciences as being interrelated in their study of man. This concept accounts for the belief that interdisciplinary concepts and generalizations as well as indigenous concepts and generalizations comprise a substantial universe from which a teacher may select and integrate to develop an interdisciplinary social study. Further, the model depicts the vital importance of and relationship to the social study that the processes of the disciplines suggest. Skills in synthesizing and refining are of paramount importance if a teacher is to use the interdisciplinary approach. The expertise of the teacher in manipulating (selecting, organizing, synthesizing) the total universe of content and processes is the crucial factor in arriving at an intellectually rigorous comprehensive view of man. In short, the skills of a master teacher are required to achieve interdisciplinary aims. However, there are additional components inherent in an interdisciplinary study and it is the intention of Part II of this chapter to explore them.



II. Elements of Process in the Interdisciplinary Approach

Process and Planning. The interdisciplinary approach to the social studies is a process-oriented approach and a teacher who would attempt to use the approach must have very clear perceptions of the many processes involved. These must be taken into account in her preparation for instruction. Preparation for instruction is always a fundamental component in any teaching strategy. This importance of planning when using an interdisciplinary approach becomes a major concern due to the eclectic nature of the approach. The teacher in using an interdisciplinary approach is not dealing with the concepts, generalizations and processes of a single discipline. This task is sufficiently demanding in itself. In using an interdisciplinary approach to the social studies the teacher is faced with the problem of manipulating a far wider universe of content and processes. These were illustrated in Part I of this chapter.

Assume that a problem has been selected by the students and/or teacher for investigation as part of their social studies program.

Long after the children have left the classroom the teacher remains and undertakes a most vital task, that of planning for an interdisciplinary study. The teacher must scan the content available to her from the social science disciplines at the level of concepts, generalizations and facts. A decision must be made to determine which of these will serve to illuminate the problem. At this point an exceedingly careful selection must be made if disciplined thinking is to be achieved.

Additionally, the teacher must be able to bring professional judgment to the task of determining which processes of the social science disciplines will facilitate the attainment of a comprehensive picture of the particular study about to be undertaken. Will a field trip undertaken from



an anthropological point of view which might include participant observation, assist the students in this study? Can the skills of the economist in developing questionnaires be introduced to the children during the course of this study? Such decisions require careful and thoughtful planning. However, another aspect of process must be considered.

Process and General Skills Development. The interdisciplinary approach indicates that a teacher must provide specific time for the development of the general skills necessary to carry out a social study. How then can a teacher accommodate the processes of the social science disciplines as well as the processes involved in general skill development? Model II attempts to explore this question.

MODEL II

Early Elementary Level

Upper Elementary Level

EMPHASIS	ADDITIVE
General Process Skills	Processes of the Social Sciences
Processes of the Social Sciences	General Process Skills

What this model suggests to a teacher is that in the early elementary years the teacher's emphasis would naturally be upon general process skills which are designed to enable children to carry out fundamental research activities. Depending upon the ability of the students and the time available to the teacher, instruction in the processes of the social science disciplines could be initiated. At the upper elementary level, the reverse procedure would be followed. However, the ability of the teacher to perceive the needs of the students in this regard



remains the determining factor.

So far three ideas have been discussed. In using the inter-disciplinary approach to the social studies, very careful attention must be given to planning. Attention to the processes of the disciplines must be insured. Third, specific attention to general process skills must be provided. A fourth dimension of process as it relates to the interdisciplinary approach is inherent in the consideration a teacher must devote to inductive strategies.

Inductive Strategies. Because the interdisciplinary approach to the social studies is inductively oriented, the teacher must determine the inductive strategies that are to be built into the pre-instruction plan. Will problem-solving, inquiry type procedures be used? What types of cognitive strategies must be incorporated to permit children to discover the concepts and/or generalizations delimited for this study? Again such decisions must be made prior to instruction after careful and deliberate planning has been instituted. Attention to these kinds of questions will facilitate the goal of disciplined thinking that is so much a part of the interdisciplinary philosophy.

Another perspective on the concept of process as it relates to the interdisciplinary approach is inherent in the consideration a teacher must devote to values and citizenship development.

Valuing Process. It has been established that the interdisciplinary approach to the social studies is vitally concerned with values and citizenship development. On the other hand, interdisciplinarians do not support indoctrination. The interdisciplinary approach supports providing experience in considering the divergence of and competition



among values in society. Consequently, it could be argued that the teacher must be aware of and able to provide experiences that will permit children such exploration. In short, in implementing an interdisciplinary approach, a teacher must provide students with experience in a valuing process. Only by giving children experience in a valuing process can they be exposed to the diversity, complexity, and competitive nature of values. In this way a teacher will be able to improve the quality of their beliefs about values and assist them to be good citizens. Therefore, time must be built into the instructional plan to provide for experiences in the valuing process.

Summary - Part II

Due to the eclecticism of its nature, a teacher who would use an interdisciplinary approach to the social studies must devote very particular attention to the pre-instruction plan. Attention to the processes of the disciplines must be included. In addition specific time must be built into this plan for general skill development. Because the interdisciplinary approach is an inductively oriented one, the teacher must be able to incorporate and ultimately operationalize a variety of inductive and cognitive processes aimed at enabling the child to discover for himself the delimited concepts, generalizations and facts. Finally, the interdisciplinary approach to the social studies emphasizes that children must be exposed to the diversity of and competition among values within society. Consequently, experiences must be provided to the child to explore the many dimensions of values through a valuing process. Again, the expertise of the teacher in recognizing and being able to integrate these many processes remains the key factor in determining the success



of any social study undertaken from an interdisciplinary perspective.

Summary of Chapter V

This chapter attempted to clarify further the theory of the inter-disciplinary approach as presented in the synthesis of Chapter IV. Model I was used to illustrate the many features of the approach and to demonstrate visually and possibly clarify the concept of what constitutes an interdisciplinary concept and generalization. Additionally, attention was evoked through the use of this model to emphasize the role

- that the process of the social sciences disciplines have within this approach and
- to highlight the significant fact that in translating the theory into practice the sophisticated skills of a master teacher are required.

Part II of the chapter probed more deeply into additional processes inherent in the interdisciplinary approach. These were identified as the critical aspects of planning; general skills development was regarded through the use of Model II; inductive and cognitive strategies and finally a valuing process.

The view was presented that the interdisciplinary approach can be a viable approach to the teaching of the social studies. However, the feasibility of the approach being utilized by the "average" teacher remains a question that requires further exploration. Chapter VI will attempt to consider this question and others which are suggested by the research presented thus far.



CHAPTER VI

THE INTERDISCIPLINARY APPROACH TO THE SOCIAL STUDIES: RESEARCH, PEDAGOGICAL PROSPECTS AND CONCLUSIONS

This study was undertaken because of a recognition of an increasing trend toward interdisciplinary studies. (For example, Brameld, 1970, p. 348; Becker, 1969, p. 74; Smith, 1965, p. 45; Drucker, 1969, p. 351, to name but a few, support this contention). Consequently, it was felt that some addition to our present knowledge might result if indeed clarification of the interdisciplinary approach were attempted. As a result of the research a definition of the approach was formulated and a statement made regarding the constituent elements of the interdisciplinary approach to the social studies. Nevertheless, many questions remain. It is the purpose of this chapter to explore some of these provoking questions as they appear to indicate some areas where further research might be initiated.

Part I, therefore, explores possible areas where further research might be contemplated. Part II discusses some implications of the research for teacher education. Part III explores a few brief implications for education and the chapter concludes with several perspectives on the viability of the interdisciplinary approach to the social studies.

Preston (1968) stated that "to the author's knowledge, no significant research concerning the merits of unified social studies has been reported in recent years. Practically all such research was conducted between 1923 - 1943 (p. 48)". The research conducted for this investigation supports Preston's statement. Three empirical studies, Collings (1923), Seagoe (1936) and Farthing (1940) fail to define the instructional techniques that they purported to test. Consequently,



it is impossible to speculate on the applicability of this research to the endeavor. Yet in reflecting upon this study the writer must agree with Brubaker (1969) that,

experimental efforts along both the multidisciplinary and interdisciplinary lines will have to be researched in a variety of classroom situations: at the present time we should recognize that our prescriptions are based more on hunches than solid research findings (p. 155).

One basic factor in designing such research must be an attempt by the researchers to define accurately the terms they are using so as to permit objective assessment of the results. Given this condition, what are some of the areas that appear to need further research?

I. Possible Areas for Further Research

The synthesis presented in Chapter IV suggests possible areas in which research is needed.

Related to the theme on values and citizenship development several questions are suggested by theorists who are critics of the interdisciplinary approach.

- What values do interdisciplinarians espouse?
- What values are to be taught and on whose authority?
- How do these values relate to the overall goals of social studies instruction?
- In what way do interdisciplinary concepts and generalizations relate to values?

Considering the fact that interdisciplinarians believe that students should be given experiences in examining the diversity and complexity of values, question one and two have no basis for consideration. It



could be argued that if interdisciplinarians were to outline a particular set of values to be taught this would come dangerously close to the the very concept of indoctrination which they do not in fact support.

Therefore, questions one and two may be supplanted by:

- 1. How can the interdisciplinary view of the importance of exposing children to the diversity of values be made operational in the classroom?
- 2. How does the concept of the role of values within the interdisciplinary approach relate to the overall goals of social studies instruction?
- 3. Are the goals of the social studies similar to or different from those of the interdisciplinary approach?
- 4. In what way do interdisciplinary concepts and generalizations assist in promoting social studies objectives?
- 5. In what way do interdisciplinary concepts and generalizations assist in promoting interdisciplinary objectives?
- 6. Can we develop good citizens through planned educational action or are values not taught directly but obliquely by example, contagion and reflection?
- 7. Assuming that there is a lack of an agreed upon societal value structure and given the fact that interdisciplinarians aim at developing good citizens how do they propose to do it?
- 8. How would interdisciplinarians define the concept of a "good citizen"?

From a consideration of the theme on the processes of the disciplines, we know that interdisciplinarians support the idea that we must teach children the processes by which the social scientist gains his



knowledge. We need to ask the following questions:

- 1. Can teachers be taught the processes of the social science disciplines in such a way that they can operationalize these processes in their classroom?
- 2. Will basic courses in the individual social sciences instruct teachers in these processes?
- 3. Should other alternatives be explored relative to these two questions?
- 4. Does the extent to which a teacher has been exposed to these processes during his or her university career correlate with the extent to which he or she will use these processes in teaching?
- 5. Does knowledge of the social science processes contribute to the student's recognition that future learning is thereby facilitated?

Further in respect to this same theme social scientists might consider the following questions:

- 1. Are the interdisciplinary processes legitimate, intellectual processes?
- 2. Do these processes cut across the social science disciplines?
- 3. Are there significant methodological differences that do follow disciplinary boundaries as Schwab contends?
- 4. If these interdisciplinary processes are legitimate processes, are they teachable? that is, can teachers be instructed
 - a) to identify and use them.
 - b) to make them useful to their students?
- 5. What advantages are there to the use of interdisciplinary pro-



processes as opposed to traditional processes?

- 6. Will they contribute to:
 - a) the aims and objectives of social studies education?
 - b) the goals supported by the interdisciplinary approach to the social studies?

One final question that is suggested by this theme that reflects the concern of Phenix, "that no clue is provided by the subject matter as to the methods appropriate to the composite inquiry (Phenix, 1964, p. 340)."

7. If a teacher decides to use an interdisciplinary approach to a particular piece of content, how will that teacher know which processes of what social science disciplines will best illuminate that content?

With regard to the theme on the content of the social sciences, social scientists might consider attempting to arrive at some conclusions regarding these questions:

- 1. Are concepts and generalizations that are frequently referred to as "over-arching", "surpassing the disciplines" or "cutting-across the disciplines" in fact interdisciplinary?
- 2. If this is so, does the fact that two or more social sciences have arrived at the same generalization or concept add to the validity of that generalization or concept?
- 3. If this is so, would this tend to minimize somewhat the dynamic nature of that concept or generalization and provide additional security support to the teacher who would use it?

Educators might attempt to answer the following questions relative to this theme:

1. How can interdisciplinary concepts and generalizations be



- operationalized at the classroom level?
- 2. Do such concepts and generalizations require particular skills by a teacher when they are being developed in the classroom?

The theme concerning the "How" of the interdisciplinary approach suggests the following questions:

- 1. How can problems of interest to students be selected to
 - a) accommodate the aims and objectives of social studies?
 - b) accommodate the aims and objectives of the interdisciplinary approach to the social studies?
- 2. In what way can a teacher select in conjuction with her students problems of interest to those students and avoid redundancy or would Senesh's concept of the organic curriculum provide for this dilemma?
- 3. Does the interdisciplinary approach require a team-teaching strategy? or can a single teacher undertake such a technique?
- 4. Does an interdisciplinary approach lend itself to facilitate learning with those students sometimes referred to as "slow-learners"?
- 5. Can students of high intelligence quotient be stimulated by an interdisciplinary approach to social studies?
- 6. Does sex or socio-economic status reflect the viability of the approach.
- 7. Can a teacher with a degree other than a B.Ed. implement the interdisciplinary approach as well as or better than or not as well as a teacher with that education background?

Finally, a whole series of questions derives from the concept of



structure with which the interdisciplinary approach has a somewhat tenuous relationship. Morrissett (1967, pp. 25, 29, 31, 33) depicts in diagramatic form the fundamental ideas of economics, political science, sociology, and anthropology that constitute their structure. Each structure becomes more meaningful if one recognizes how the ideas are interrelated to produce the composite structure. If, however, a social study were to be developed by using the interdisciplinary approach to the social studies, the following list of fundamental ideas might result.

A SOCIAL SCIENCE DISCIPLINES	B PROCESS OF CONTENT SELECTION	C
History Geography Anthropology Economics Political Science Sociology		
	O concep discip	

1. Does the collection of concepts depicted in Column C, which might be used in a social study, represent another legitimate conception of structure with the benefits that Bruner (1960) associates with structure?

interdisciplinary concepts

2. If you use an interdisciplinary approach how do you isolate the appropriate syntactical structure?



3. If you use an interdisciplinary approach do you lose the benefits attributed to teaching structure?

And finally, perhaps two of the most provocative questions to suggest themselves are:

- 4. What is structure?
- 5. What does the concept of structure suggest for those people who teach the social studies?

We might conclude that when we have answers to some of the questions suggested above, we will be in a better position to speculate on these questions:

- 1. Does the interdisciplineary approach to the social studies provide a disciplined vehicle for viewing a comprehensive picture of man?
- 2. Can a single teacher implement the approach?

II. Implications for Teacher Education

Throughout this thesis two ideas were presented that could have profound implications for education in the social studies. First, a child should begin his education by viewing a comprehensive wholistic picture of man. This approach will make later more specialized studies more meaningful and contribute to the relevance of the curriculum. Secondly, in order to accomplish this goal the perspectives of all the social science disciplines are necessary. Further, the processes of these disciplines must be given particular attention if the ideal of life-long education is to be realized.

The consideration of these two ideas in relation to education leads to two broad questions:



- 1. How will the various ideas related to the interdisciplinary approach to the social studies, influence educational planning, organization and instruction?
- 2. If we consider the interdisciplinary approach to be one viable alternative available to the social studies teacher, what implications for teacher education does the theory presented in this study have?

Chapter V attempts to indicate certain perspectives on question one. The second part of this chapter suggests ways of approaching answers to question two.

One of the most fundamental insights provided by this study with regard to teacher education is that we must provide teachers for the school system who have a better mastery of the social science disciplines than ever before. However, as educational philosophy moves further and further away from prescriptive courses required of the student to greater freedom for that student to exercise responsible course selection, this first requirement demands particular attention. What alternatives exist to facilitate recognition by the undergraduate teacher-in-training of the basic importance of acquiring a general knowledge in the social science disciplines other than history and geography? How can students be encouraged to take basic courses in economics, anthropology and political science, for example? Obviously very careful attention to student counselling is one possible way of dealing with this dilemma. Further, academicians could make their course offerings so attractive that students will choose them as desirable options. This idea will be discussed in a related context later in this chapter. Another idea that should be explored is the importance of experiences in teacher education.



The Role of Experiences

The necessity to familiarize student teachers, by whatever means, with the content and processes of the social science disciplines is only one implication of this study. In order to be able to implement the interdisciplinary approach to the social studies teachers must be provided with numerous experiences during their educational training specifically designed to enable them to operationalize this knowledge. This appears to suggest the necessity of developing a very close liaison between the curriculum and instruction courses and the student teaching aspect of the program. If at all possible, the professor should be able to provide a common background related to specific instructional techniques and assign specific tasks to be completed during the course of student teaching. The cooperating teacher and student should jointly assess the extent to which the objectives had been reached. This feedback to the student would facilitate consideration of modifications related to that teaching technique that might be incorporated at a later date. In brief what is being suggested is that the theory must be followed by direct experience in applying that theory. Open-ended discussion of the performance might result in modification of the implemening plans. The student should then be given the opportunity to repeat the performance. This suggestion is not radically new and attempts to provide this type of experience is being done. Micro-teaching is one way this goal is attempted to be met but much debate has developed over its effectiveness and economic feasibility. It is the contention of this writer that theory must be followed up by experiences in operationalizing that theory. Perhaps the extent to which we succeed in accomplishing this will be highly correlated to the extent to which our



If micro-teaching is not the only answer, then viable alternatives must be explored to accomplish the goal. Because the interdisciplinary approach to the social studies is an eclectic approach, provision for these types of experience may have profound effect on the success with which it is implemented.

Inductive Strategies and Role of Direct Experiences

Another idea revolves around the inductive development of social science content. We have seen that the interdisciplinary approach to the social studies is essentially concerned with the inductive development of concepts and generalizations. This suggests several things for teacher education.

- 1. We must instruct students in inductive development techniques in such a way as to enable them to move from the expository method to one which parallels, for example, Taba's inductive approach to developing concepts and generalizations. Again, the provision of direct experiences in testing out the theory might be one avenue aimed at closing the gap between theory and practice.
- 2. Social studies instructors must iterate and reiterate the importance of Schwab's idea concerning the dynamic nature of the conceptual structure of the disciplines. Teachers who would use the interdisciplinary approach must recognize that there is little place in the social studies for universal generalizations and truths. They must recognize and "learn to be emotionally content with probabilistic generalizations



that are subject to revision and the possibility of exception (Palmer, 1965, p. 166)."

In addition to developing comprehensive knowledge of the social science disciplines along with the ability to operationalize inductive strategies, teachers must be given an expertise in a wide range of planning skills.

Importance of Planning Skills

We have seen that the interdisciplinary approach to the social studies requires the skills of a sophisticated planner. Consequently, our curriculum and instruction courses must not take for granted the ability of students to prepare short and long term plans and to implement these plans. Specific experiences must be afforded students during their teacher education to enable them to become expert planners. Perhaps we should entertain the idea of setting aside one-third of our instructional time at the University level. This time could be planned by the students for problems that are of interest to them. The advantages and disadvantages of such an approach could be explored in relation to fostering planning strategies so essential in classroom teaching and particularly in the use of the interdisciplinary approach to the social studies.

So far several ideas have been developed with regards to teacher education. One, teacher education must provide for increasing mastery of the social science disciplines. Second, experiences in inductive development of concepts and generalizations must be provided with third, experiences aimed at increasing teacher expertise in classroom planning. A fourth idea evolves around another fundamental interdisciplinary process, that of synthesis.



Role of Synthesis

It was stated that one of the most unique characteristics of the approach is its synthesizing nature and further "it is recognized that expertness in the synthesizing of ideas is a scholarly and disciplined act (Michaelis, 1965, p. 15)." Additionally, "in the social studies the prevailing motive is synthesis (Engle, 1964, p. 381)." Given these propositions it follows that specific experiences must be provided to students to enable them to develop a greater degree of expertness in the process of synthesis. Only by developing such skills will they be able to function more professionally as social studies teachers and implement the interdisciplinary approach should they wish to do so. The interdisciplinary approach, in effect, adds to the skills of any one specialist, "the skills of all the other specialists in order to draw from a large body of evidence a more varied significance than any one discipline could hope to do. When expertly done, the result can be a well synthesized study otherwise.....(Carson, 1958, p. 30)." Therefore, attention to increasing student teachers expertise in the processes involved in synthesis seems advisable.

Summary

The implications for teacher education underscored the need to equip teachers with an indepth knowledge of and ability to operationalize the concepts, generalizations and processes of the social science disciplines. The crucial role of direct experiences was explored. It was contended that providing students, as part of their teacher education experiences in techniques of inductive teaching, planning skills and the processes involved in synthesis should be considered. The provision of such experiences was seen as facilitating and encouraging the use of



as an initial step in closing the gap between theory and practice.

III. <u>Implications for Education</u>

Because the interdisciplinary approach to the social studies is vitally concerned with bringing more of the social science disciplines into social studies programs, educators might consider the following questions:

- If it is so fundamental that our teachers have a strong social science background, can we afford to leave this task totally to the academician with his specialist perspective?
- 2. Does a social studies teacher utilize the social science disciplines with the same set of objectives as does the social scientist?
- 3. Should there be a " "rapproachement" among scholars in the various fields of study, professors in our colleges or education (Kitzinger, 1968, p. 54)?"
- 4. Should educators attempt to exercise some control over the scope and goals of social science courses that education students participate in?
- 5. If this is not feasible, should education faculties consider offering courses in the structure of the disciplines or indeed interdisciplinary courses?
- 6. As there is an apparent trend to interdisciplinary studies should educators ask the scholars "in what way each of their disciplines contribute to the wholeness of a whole man (Foshay, 1965, p. 50)?"



Finally, one question of a rather different cast,

7. Should we consider the possibilities of including mini courses of approximately three weeks duration evolving around particular techniques such as inquiry, role-playing etc. with a very strong emphasis on the participatory work-shop approach? During the duration of one semester a student might be able to actively participate in a variety of such work-shops while increasing his ability to attain both social studies and interdisciplinary goals (if these are indeed different) by a variety of methods.

Conclusions

The writer supports the view that there is no "best" way to teach the social studies. The interdisciplinary approach is one viable alternative for organizing the social studies for instruction. Further, the need for instructional alternatives eluded to in Chapter I presupposes that we educate at the university level, a higher caliber of teacher with the ability to be flexible and utilize alternative instructional patterns. Consequently, the apparent trend toward interdisciplinary work seems to indicate that colleges of education and inservice training programs for teachers should pay greater attention to equipping them with the skills necessary for successful interdisciplinary exploration.

The interdisciplinary approach does afford the possibility, due to the eclecticism of its nature, to "whet our appetites for knowledge, to teach us the delight of doing a job well and the excitement of creativity, to teach us to love what we do and help us to find what we



love to do (Szent-Gygorgi, 1964, p. 1278)." In order to accomplish this, the teacher must have sophisticated levels of knowledge and skills and a desire to assist children reflect, in a comprehensive manner, upon the social problems which affect their lives.

The interdisciplinary approach to the social studies provides a challenge to the elementary school teacher to open the door to the unknown, to risk a part of himself and to engage students in the quest for meaningful, viable experiences designed to make life more comprehensible. It is a technique that educators should explore. Because the influx of programmed materials is increasing rapidly, the approach has many compensating aspects. One of these aspects is that the interdisciplinary approach affords an opportunity to utilize the professional skills a teacher has developed. These skills can foster the educational committment to individualized instruction. The interdisciplinary approach responds to problems that are of interest to children and attempts to help them formulate their own conclusions in the manner of the social scientist. As such the interdisciplinary approach provides a very important tool to increase a teacher's educational freedom.

The interdisciplinary approach to the social studies can be an intellectually rigorous approach. When implemented by a master teacher, it can provide all the benefits of a disciplined and scholarly endeavor. It has the potential of making a profound impact on elementary education.



BIBLIOGRAPHY



BIBLIOGRAPHY

- Adler, M. J. and Mayer, M. <u>The revolution in education</u>. Chicago: University of Chicago Press, 1958.
- Allen, J., and others. The role of the social studies. Social Education, October 1962, 26, 315 318.
- Aronson, S. H. Obstacles to a rapproachement between history and sociology: A socologist's view. In M. Sherif, and C. W. Sherif. <u>Interdisciplinary relationships in the social sciences</u>. Chicago: Aldine Publishing Company, 1969, 292 304.
- Baker, D. G. American studies, social studies, and the process of education. Social Education, December, 1963, 27, 427 430, 455.
- Barnes, F. P. Research for the practitioner in education. Washington: National Education Association, 1967.
- Beauchamp, G. Developing a scientific theory in curriculum. St. Louis: Association for Supervision and Curriculum Development. St. Louis: March 11, 1963, (Mimeographed).
- Becker, J. M. Organizing the social studies program. In D. McC. Fraser, (Ed.) Social studies curriculum development: Prospects and problems. (Thirty-ninth yearbook). Washington: National Council for the Social Studies, 1969, 65 97.
- Bellack, A. Knowledge structure and the curriculum. In S. Elam, (Ed.) Education and the structure of knowledge. Chicago: Rand McNally, 1964, 263 277.
- Berelson, B. Introduction. In American Council of Learned Societies and the National Council for the Social Studies. The social studies and the social sciences. New York: Harcourt, Brace and World, 1962.
- Berelson, B. (Ed.) The behavioral sciences. New York: Basic Books, 1963.
- Bergson, H. Creative evolution. New York: Random House, 1944.
- Bloom, B. S. Ideas, problems and methods of inquiry. In National Society for the Study of Education. <u>Integration of educational experiences</u>. (Fifty-seventh yearbook) Chicago: University of Chicago Press, 1958, 84 105.

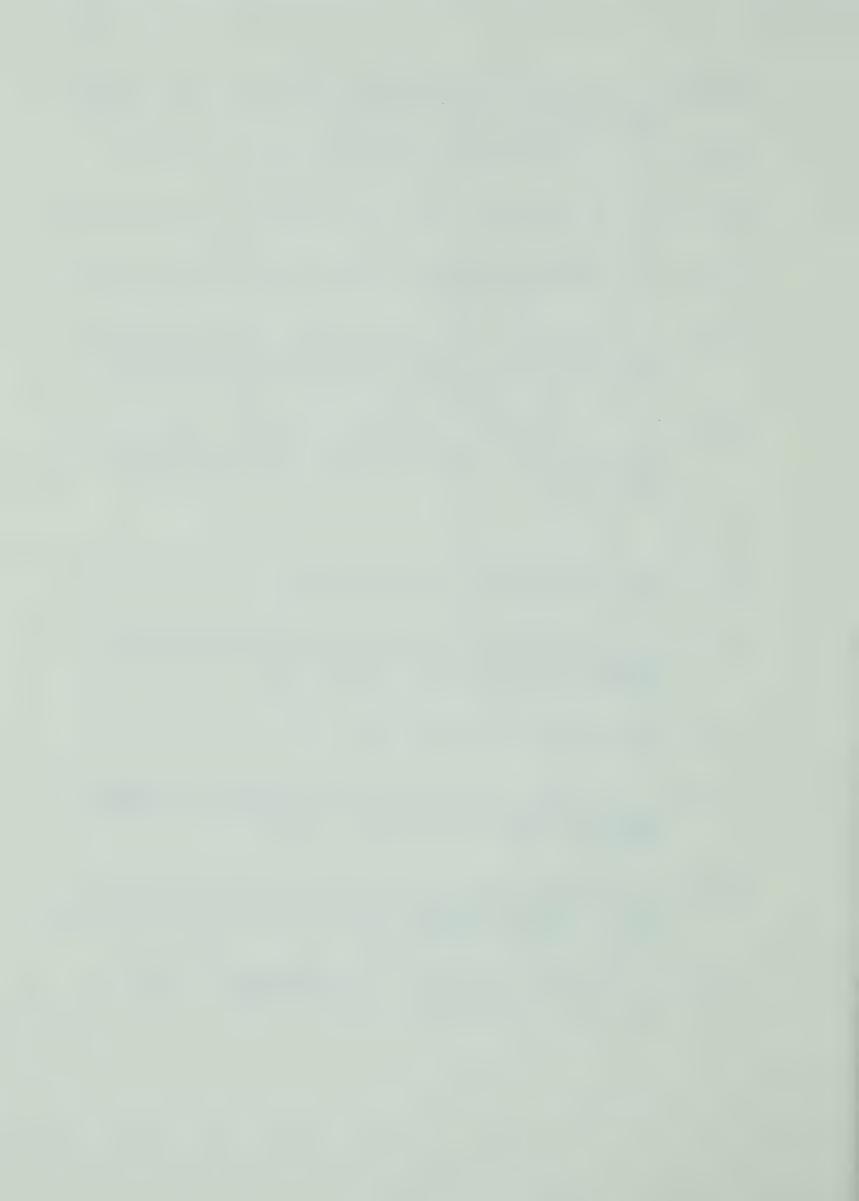


- Board of Cooperative Educational Services. <u>BOCES social study report.</u>
 New York: Author, 1965.
- Boring, E. G. A history of experimental psychology (2nd ed.) New York: Appleton-Century Crofts, 1950.
- Boulding, K. E. What can we know and teach about social systems. In J. C. McLendon, W. W. Joyce, and J R. Lee. Readings on elementary social studies: Emerging changes (2nd Ed.) Boston: Allyn and Bacon, 1970, 161 173.
- Brady, M. The key concept. <u>Social Education</u>. November, 1967, <u>31</u>, 601 604.
- Brameld, T. The remaking of a culture: Life and education in Puerto Rico. New York: Harper, 1959.
- Brameld, T. A cross-cutting approach to the curriculum: The moving wheel. Phi Delta Kappan. March, 1970, 51, 346 348.
- Brubaker, D. L. <u>Social studies in a mass society</u>. Scranton, Pennsylvania: International Textbook Company, 1969.
- Bruner, J. S. <u>The process of education</u>. Mass.: Harvard University Press, 1960.
- Bruner, J. S. On knowing. Mass.: Harvard University Press, 1962.
- California State Department of Education. Bulletin. Author, 1957.
- California State Department of Education. Report of the state central committee on social studies. In B. G. Massialas, and A. M. Kazamias. Crucial issues in the teaching of social studies. Englewood Cliffs, N. J.: Prentice-Hall, 1964.
- Campbell, D. T. Ethnocentrism of disciplines and the fish-scale model of omniscence. In M. Sherif, and C. W. Sherif. <u>Interdisciplinary relationships in the social sciences</u>. Chicago: Aldine Press, 1969, 328 348.
- Carson, G. B. Jr. New viewpoints in history. In R. A. Price, (Ed.)

 New viewpoints in the social sciences. Washington: National
 Council for the Social Studies, 1958, 20 38.
- Chase, S. The proper study of mankind. New York: Harper and Row, 1948.
- Chasnoff, R. E. (Ed.) Elementary curriculum, a book of readings. New York: Pitman, 1964.



- Chatterton, R. Interdisciplinary learning of social studies. Audiovisual Instructor, April, 1969, 14, 27 - 28.
- Collings, E. <u>An experiment with a project curriculum</u>. New York: MacMillan, 1923.
- Cooke, R. J. The dim candle of Mr. Beard. <u>Social Education</u>. December, 1963, 27, 416 418.
- Crary, R. W. <u>Humanizing the school: Curriculum development and theory.</u> New York: Knopf, 1969.
- Curtin, J. T. Educating citizens for responsible participation in government, 1960 1980. In F.Patterson, (Ed.) <u>Citizenship and a free society: Education for the future</u>. Washington: National Council for the Social Studies, 1960, 81 108.
- Danielsen, A. J. and Vinge, D. L. Practical problems. In U. Kitzinger (Ed.) and others. <u>Interdisciplinary studies in secondary schools</u>. London: The Atlantic Information Center for Teachers, 1968, 52 54.
- Davis, K. Human society. New York: MacMillan, 1950.
- Douglass, M. P. <u>Social studies</u>, from theory to practice in elementary education. New York: Lippincott, 1967.
- Dressel, P. The meaning and significance of integration. In National Society for the Study of Education. The integration of educational experiences. (Fifty-seventh yearbook) Chicago: University of Chicago Press, 1958, 3 26.
- Drucker, P. F. The age of discontinuity. New York: Harper and Row, 1969.
- Drummond, H. D. Separate or merged Sound experiences are vital. In J. Jarolimek, and H. M. Walsh, (Eds). Readings for social studies in elementary education. London: Collier-MacMillan, 1965, 85 91.
- Dubin, R. Contiguous problem analysis: An approach to systematic theories about social organization. In M. Sherif, and C. Sherif. Interdisciplinary relationships in the social sciences. Chicago: Aldine, 1969, 65 77.
- Dunfee, M., and Sagl, H. Social studies through problem solving. New York: Holt, Rinehart and Winston, 1966.



- Ellsworth, R. Trends in organization of the social studies. In J. U. Michaelis, (Ed.) <u>Social studies in the elementary schools</u>. Washington: National Council for the Social Studies, 1962, 107 131.
- Engle, S. H. Decision making: The heart of social studies instruction. Social Education, 1960, 24, 301 304, 306.
- Engle, S. H. Thoughts in regard to revision. Social Education, April, 1963, 182 184, 196.
- Engle, S. H. Decision-making: The heart of social studies. In R. E. Chasnoff. Elementary curriculum: A book of readings. New York: Pitman, 1964, 381 388.
- Engle, S. H. Objectives of the social studies. In B. G. Massialas, and F. R. Smith (Eds.) New challenges in the social studies. California: Wadsworth, 1965, 1 21.
- Elam, S. (Ed.) Education and the structure of knowledge. Chicago: Rand McNally, 1964.
- Elam, S. and McClure, W. P. Educational requirements for the 1970's, an interdisciplinary approach. New York: F. A. Praeger, 1967.
- Estevan, F. J. Social studies in a changing world. New York: Harcourt, Brace and World, 1968.
- Farthing, D. K. <u>Techniques for the appraisal of elementary school</u> instructional programs. Jefferson City, Miss: Office of State Superintendent of Public Schools, 1940.
- Feigl, H. Scriven, M., and Senesh, L. Concluding comments. In I. M. Morrissett (Ed.) <u>Concepts and structure in the new social science curricula</u>. New York: Holt, Rinehart, and Winston, 1967, 50 56.
- Fenton, E. Teaching the new social studies in secondary schools. New York: Holt, Rinehart and Winston, 1966.
- Fenton, E. A structure of history. In I. Morrissett (Ed.) <u>Concepts</u> and structure in the new social science curricula. New York: Holt, Rinehart and Winston, 1967a, 50 56.
- Fenton, E. The new social studies. New York: Holt, Rinehart and Winston, 1967b.
- Fenton, E. Structure and Inquiry. In <u>Structure in the social studies</u>. Washington: National Council for the Social Studies, 1968, 75 81.



- Ford, G. W., and Pugno, L. The structure of knowledge and the curriculum. Chicago: Rand McNally, 1964.
- Foshay, A. W. A modest proposal...For the improvement of education. Educational Leadership, May, 1961, 18, 506 516.
- Fraser, D. McC., The changing scene in social studies. In <u>Social studies curriculum development: Prospects and problems</u>. (Thirty-ninth yearbook). Washington: National Council for the Social Studies, 1969, 1 32.
- Fraser, D. Social sciences. <u>Nation's Schools</u>, July, 1969, <u>84</u>, 31 35.
- Frost, J., and Rowland, G. T. <u>Curricula for the seventies</u>. Boston: Houghton Mifflin, 1969.
- Frye, N. (Ed.) <u>Design for learning</u>. Toronto: University of Toronto Press, 1962.
- Gail, A., and Charton, M. A. The pedagogic and educational value of interdisciplinary studies. In U. Kitzinger, and others.

 Interdisciplinary studies in secondary schools. London: The Atlantic Information Center for Teachers, 1968, 55 57.
- Garai, J. E. The message of youth in an age of revolutionary change.

 <u>Involvement</u>, 1969, 6 10, 47 51.
- Gibson, J. S. Atlantic studies at the secondary level: A programme for action. In U. Kitzinger, and others. <u>Interdisciplinary studies in secondary schools</u>. London: The Atlantic Information Center for Teachers, 1968, 27 40.
- Goldmark, B. <u>Social studies</u>, a method of inquiry. California: Wadsworth, 1968.
- Goodlad, J. New approaches to the teaching of social studies in the elementary school. <u>Indiana Social Studies Quarterly</u>. Winter, 1965 1966, 18, 54 59.
- Grambs, J. D. The social sciences and educational method. In R. A. Price, (Ed.). New viewpoints in the social sciences.

 Washington: National Council for the Social Studies, 1958, 189 202.
- Grambs, J. D. The challenge to the social studies. In F. Patterson, (Ed.). Citizenship and a free society: Education for the future. (Thirtieth yearbook). Washington, D. C.: Council for the Social Studies, 1960, 273 289.



- Hague, J. A. American studies and the problem of synthesis. Social Education, December, 1963, 27, 423 426, 439.
- Hallowell, A. I. <u>Culture and experience</u>. Philadelphia: University of Pennsylvania Press, 1954.
- Hamilton, E. Mythology. New York: New American Library, 1940.
- Hanna, L., and Hagaman, N. Section three: Action principles from studies of child development. In J. U. Michaelis, (Ed.).

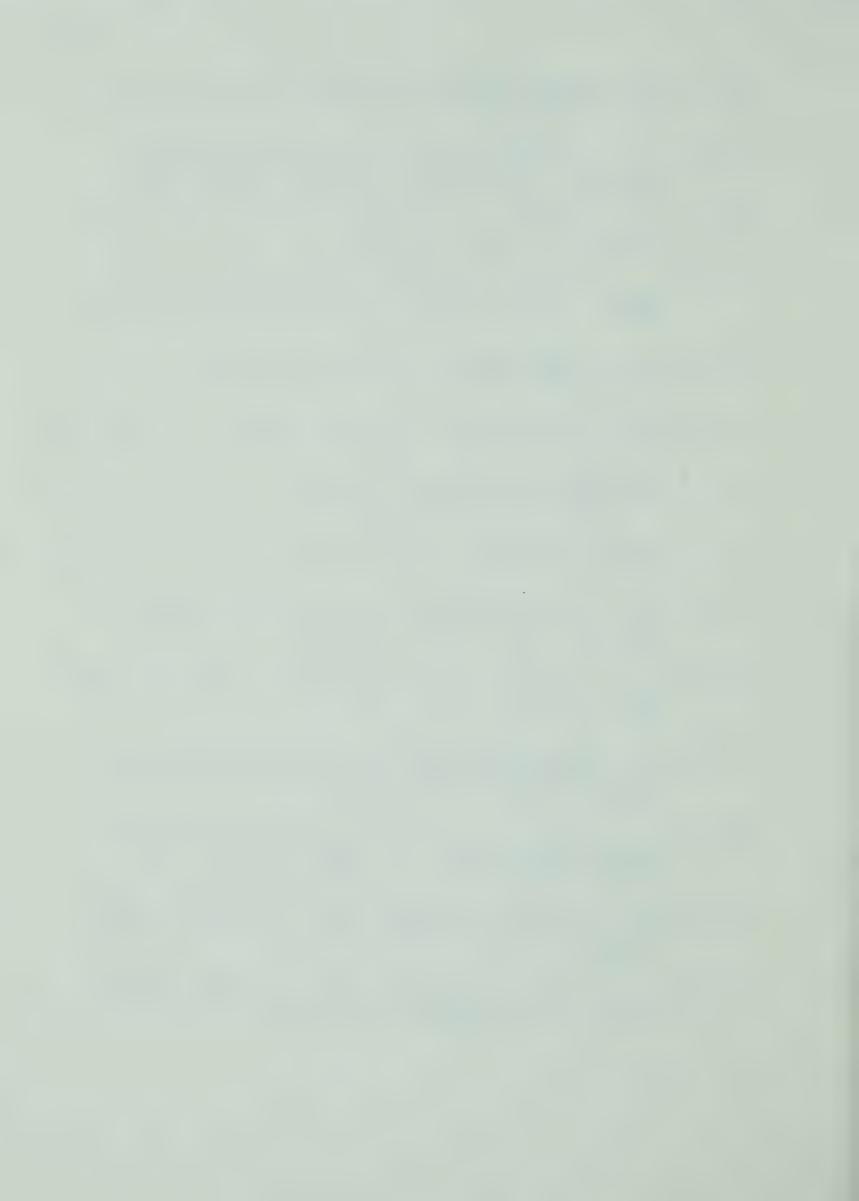
 Social studies in elementary schools. (Thirty-second year-book). Washington: National Council for the Social Studies, 1962, 32 47.
- Hanna, P. R., and Lee, J. R. Content in the social studies. In J. U. Michaelis, (Ed.). Social studies in the elementary schools. (Thirty-second yearbook) Washington: National Council for the Social Studies, 1962, 62 89.
- Hanna, P. R. The social studies program in the elementary school in the twentieth century. In W. Sowards, (Ed.). The social studies: Curriculum proposals for the future. Chicago: Scott, Foresman, 1963, 42 78.
- Hanna, P. R. Revising the social studies: What is needed? <u>Social</u> Education, April, 1963, <u>27</u>, 190 196.
- Heath, R. W. (Ed.) New curricula. New York: Harper and Row, 1964.
- Hebert, L. J., and Murphy, W. <u>Structure in the social studies</u>. Washington: National Council for the Social Studies, 1967.
- Herman, W. L. Jr. <u>Current research in elementary school social</u> studies. London: MacMillan, 1969.
- Higgins, A. O. The interdisciplinary approach A learning environment. Educational Horizons, Fall, 1969, 1 5.
- Hill. W. Major concerns about the social studies. In J. Jarolimek, and H. M. Walsh. Readings for social studies in elementary education. London: Collier-MacMillan, 1965, 23 29.
- Hofstrand, J. M. Social science generalizations for use in the social studies curriculum: Creating tools, techniques and social arrangements. (Unpublished doctoral dissertation, Stanford University) Abstracted in <u>Dissertation Abstracts</u>, February, 1960, 20, 3222 3223.
- Hunt, M. P., and Metcalfe, L. E. <u>Teaching high school social studies</u>. New York: Harper, 1965.



- Hutchins, R. M., and Fleming, A. S. Addresses on the role of government in education. Houston, Texas: William Marsh Rice University, 1963.
- Ianni, F. A. J., and Josephs, L. S. The curricula research and development program of the U. S. office of education: Project English, project social studies and beyond. In R. W. Heath, (Ed.). New Curricula. New York: Harper and Row, 1964, 161 212.
- Jarolimek, J. Social studies in elementary education. New York: MacMillan, 1959.
- Jarolimek, J. Curriculum content and the child in the elementary school. In J. Jarolimek, and H. M. Walsh, (Eds.). Readings for social studies in elementary education. London: Collier-MacMillan, 1965, 59 70.
- Jarolimek, J., and Walsh, H. M. Readings for social studies in elementary education. London: Collier-MacMillan, 1965.
- Jarolimek, J. <u>Guidelines for elementary social studies</u>. Washington, D. C. National Education Association, 1967a.
- Jarolimek, J. Social studies in elementary education. Toronto: MacMillan, 1967b.
- Johnson, E. S. <u>Theory and practice of the social studies</u>. New York: MacMillan, 1956.
- Johnson, E. S. The social studies versus the social sciences. <u>School</u> Review, Winter, 1963, 71, 389 403.
- Johnson, E. S. A viewpoint of the future of the social studies. In R. A. Price, (Ed.). New viewpoints in the social sciences. (Thirty-eighth yearbook) Washington, D. C.: National Council for the Social Studies, 1958, 218 247.
- Jones, S. H. Generalizing in the social science classroom. <u>Social</u> Education. January, 1957, <u>21</u>, 358 362.
- Joyce, B. R. <u>Strategies for elementary social science education</u>. Chicago: <u>Science Research Associates</u>, 1965.
- Joyce, B. R., and Harootunian, B. <u>The structure of teaching</u>. Chicago: Science Research Associates, 1967.
- Joyce, B. R. <u>Alternative models of elementary education</u>. Toronto: Blaisdell, 1969.
- Keller, C. R. Needed: Revolution in the social studies. <u>Saturday</u> <u>Review</u>, September 16, 1961, <u>44</u>, 60 61.



- Kellum, D. F. The social studies, myths and realities. New York: Skeed and Ward, 1969.
- Kenworthy, L. S. Studying other countries. In J. Jarolimek, and H. M. Walsh. Readings for social studies in elementary education. London: Collier-MacMillan, 1965, 417 423.
- King, A. R., and Brownell, J. The curriculum and the disciplines of knowledge. New York: Wiley, 1966.
- Kitzinger, U., and others. <u>Interdisciplinary studies in secondary schools</u>. London: The Atlantic Information Center for Teachers, 1968.
- Komarovsky, M. <u>Common frontiers of the social sciences</u>. Illinois: The Free Press, 1957.
- Kluckholn, C., and Murray, H. A. (Eds.). <u>Personality in nature, society</u> and culture. New York: Knopf, 1948.
- Kuhn, A. The study of society: A unified approach. Homewood, Illinois: Richard D. Irwin and Dorsey Press, 1963.
- Logan, L., and Rimmington, G. T. <u>Social studies</u>, a <u>creative direction</u>. Toronto: McGraw-Hill, 1969.
- McCutchen, S. A discipline for the social studies. In J. Jarolimek, and H. Walsh, Readings for social studies in elementary education. London: Collier-MacMillan, 1965.
- McMurrin, S. M. The curriculum and the purposes of education. In R. W. Heath, New Curricula. New York: Harper and Row, 1964, 262 284.
- Maccia, E. S. <u>Curriculum theory and policy, occasional paper</u>. The Ohio State University: Educational Theory Center and Social Studies Curriculum Center, 1969, 65 176.
- Mannheim, K. The social education of man. In P. Keeskemeti, (Ed.), Essays on the sociology of knowledge. New York: Oxford University Press, 1952, 230 237.
- Massialas, B. G. Research prospects in the social studies. <u>Indiana University School of Education Bulletin</u>, January, 1962, <u>38</u>
- Massialas, B. G. Revising the social studies: An inquiry-centered approach. Social Education, April, 1963, 27, 185 189.



- Massialas, B. G., and Kazamias, A. M. <u>Crucial issues in the teaching of social studies</u>. Englewood Cliffs, N. J.: Prentice-Hall, 1964.
- Massialas, B. G., and Smith, F. R. (Eds.). New challenges in the social studies, implications of research for teaching. California: Wadsworth, 1965.
- McLendon, J. C., Joyce, W. W., and Lee, J. R. Readings on elementary social studies: Emerging changes. Boston: Allyn and Bacon, 1970.
- Mead, M. An anthropologist looks at the generation gap. The Sciences, June, 1969, 9, 31 34.
- Mead, M. <u>Culture and commitment</u>: A study of the generation gap. New York: Natural History Press and Doubleday, 1970.
- Metcalfe, L. E. Research on teaching the social studies. In N. L. Gage, (Ed.). <u>Handbook of research on teaching</u>. Chicago: Rand McNally, 1963.
- Michaelis, J. U. (Ed.) <u>Social studies in elementary schools</u> (Thirty-second yearbook). Washington: National Council for the Social Studies, 1962.
- Michaelis, J. U., and Johnson, A. M. The social sciences, foundations of the social studies. Boston: Allyn and Bacon, 1965.
- Michaelis, J. U. <u>Social studies for children in a democracy</u>. Englewood Cliffs, N. J.: Prentice-Hall, 1968.
- Milgram, S. Interdisciplinary thinking and the small world problem. In M. Sherif, and C. W. Sherif. <u>Interdisciplinary relation-ships in the social sciences</u>. Chicago: Aldine, 1969, 103 - 120.
- Miller, S. C. The interdisciplinary approach to teaching social studies. Social Education, April, 1964, 28, 195 198.
- Morrissett, I. (Ed.) <u>Concepts and structure in the new social science</u> curricula. New York: Holt, Rinehart and Winston, 1967.
- Murray, H. A. Research planning: A few proposals. In A. Sargent, and R. Smith. <u>Culture and Personality</u>. New York: Viking Fund, 1949, 195 213.
- Nelson, J. A new direction. <u>Educational leadership</u>. February, 1965, 22, 293 295, 341 343



- Newman, F. M. Questioning the place of the social science disciplines in education. In J. C. McLendon, W. W. Joyce, and J. R. Lee.

 Readings on elementary social studies: Emerging changes.

 Boston: Allyn and Bacon, 1970, 181 188.
- Odegard, P. H. Education in the social studies: Fragmentation. U. S. Coordination. In J. C. McLendon, W. W. Joyce, and J. R. Lee. Readings on elementary social studies: Emerging changes.

 Boston: Allyn and Bacon, 1970, 174 180
- Oliver, D. W., and Shaver, J. P. Jurisprudential teaching and prospects for the social studies. In L. J. Hebert, and W. Murphy.

 Structure in the social studies. Washington, D. C.: National Council for the Social Studies, 1968, 83 99.
- Oppenheimer, R. An inward look. <u>Foreign Affairs</u>, January, 1958, <u>36</u>, 209 220.
- Parker, J. C., and Rubin, L. J. <u>Process as content: Curriculum design</u> and the application of knowledge. Chicago: Rand McNally, 1966.
- Patrick. J. American history in upper elementary grades: A new rationale and new strategies. <u>Indiana Social Studies Quarterly</u>. Winter, 1965 1966, <u>18</u>, 24 37.
- Patterson, F. (Ed.). <u>Citizenship and a free society: Education for the future</u>. (Thirthieth yearbook) Washington, D. C.: National Council for the Social Studies, 1960.
- Phenix, P. H. The use of the disciplines as curriculum content. Educational Forum, March, 1962, 26, 273 280.
- Phenix, P. H. Realms of meaning. New York: McGraw-Hill, 1964.
- Phenix, P. H. Education and mass communication. In W. F. O'Neill's Selected educational heresies. Chicago: Scott, Foresman, 1969, 327 333.
- Platt, M. M. Concepts and the curriculum. <u>Social Education</u>, January, 1963, <u>27</u>, 21 22, 41.
- Postman, N., and Weingartner, C. <u>Teaching as a subversive activity</u>. New York: Delacorte Press, 1969.
- Presno, V., and Presno, C. <u>People and their actions in social roles</u>. New York: Prentice-Hall, 1967.
- Preston, R. C. <u>Teaching social studies in the elementary school</u>. New York: Holt, Rinehart and Winston, 1968.



- Price, R. A. <u>New viewpoints in the social sciences</u>, (Twenty-eighth yearbook). Washington, D. C.: National Council for the Social Studies, 1958.
- Price, R. A., Smith, G. R., and Hickman, W. L. Major concepts for the social studies. Syracuse, N. Y.: Social Studies Curriculum Center, Syracuse University, 1965.
- Price, R. A. Goals for the social studies. In D. McC. Fraser, (Ed.).

 Social studies curriculum development: Prospects and problems.

 (thiry-ninth yearbook). Washington, D. C.: National Council for the Social Studies, 1969, 33 64.
- Rader, W. D. The intermediate grades: Should children answer their own questions? In B. Cox, and B. G. Massialas. Social studies in the United States. New York: Harcourt, Brace and World, 1967, 36 52.
- The Random House dictionary of the English language (College Ed.). New York: Random House, 1968.
- Ratcliffe, R. H., and Lee, J. R. The many faces of social studies. In J. C. McLendon, W. W. Joyce, and J. R. Lee. Readings on elementary social studies: Emerging changes. Boston: Allyn and Bacon, 1970, 513 521.
- Roose, K. D. Observations on interdisciplinary work in the social sciences. In M. Sherif, and C. W. Sherif. <u>Interdisciplinary relationships in the social sciences</u>. Chicago: Aldine Publishing, 1969, 323 327.
- Sanders. N. M., and Tanck, M. L. A critical appraisal of twenty-six national social studies projects. <u>Social Education</u>, April, 1970, 34, 407 409.
- Sargent, S., and Smith, M. W. <u>Culture and personality</u>. New York: Viking Fund, 1949.
- Scriven, M. The structure of the social studies. In G. W. Ford, and L. Pugno. The structure of knowledge and the curriculum. Chicago: Rand McNally, 1964.
- Scriven, M., Feigl, H., and Senesh, L. Concluding comments. In I.

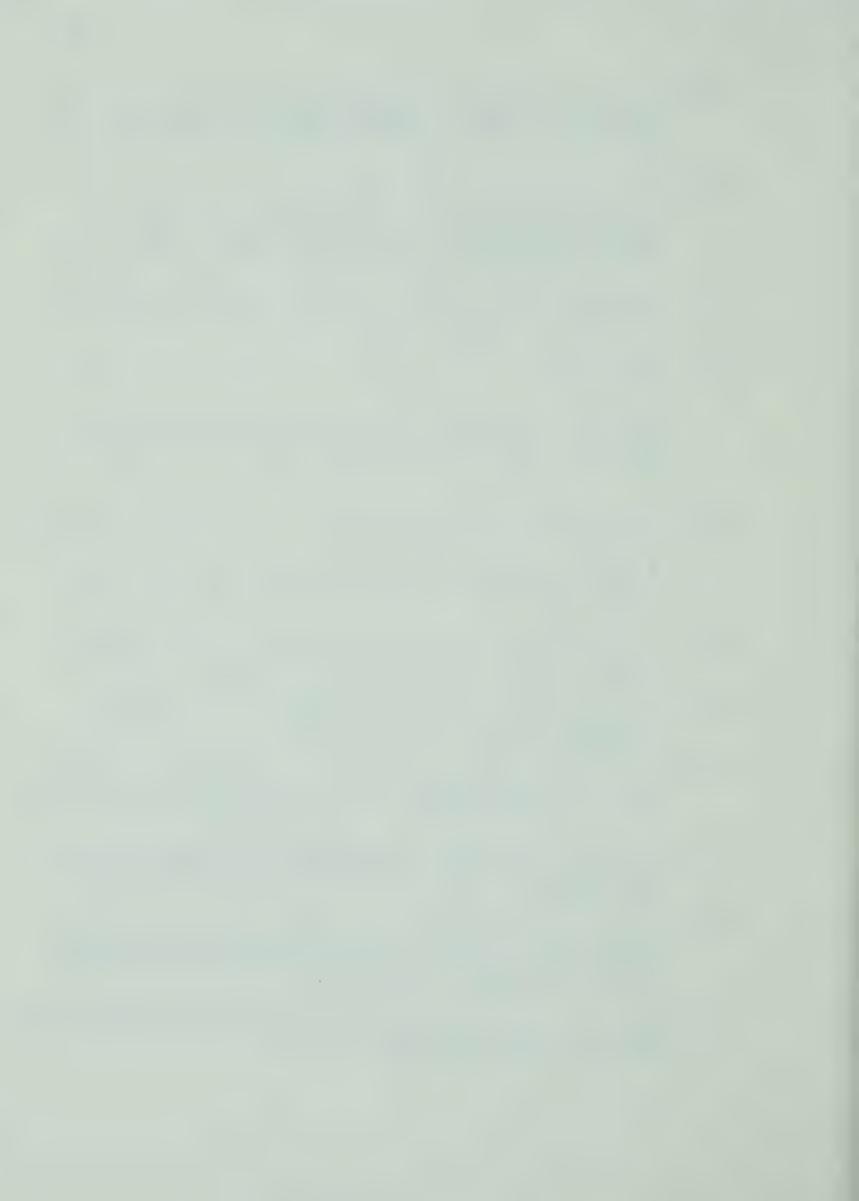
 Morrissett (Ed.). Concepts and structure in the new social
 science curriculum. New York: Holt, Rinehart and Winston,
 1967, 147 151.
- Schwab, J. J. Problems, topics, and issues. In S. Elam. Education and the structure of knowledge. Chicago: Rand McNally, 1964.



- Schwab, J. J. The concept of the structure of a discipline. In L. J. Hebert, and W. Murphy. Structure in the social studies. Washington: National Council for the Social Studies, 1967, 43 56.
- Schutze, J. The UNESCO associated schools project: An example of interdisciplinary studies. In U. Kitzinger, and others.

 Interdisciplinary studies in secondary schools. London: The Atlantic Information Center for Teachers, 1968, 41 49.
- Seagoe, M. U. Qualitative wholes: Classroom experiment, <u>Journal of Educational Psychology</u>, November, 1936, 27, 612 620.
- Senesh, L. <u>Economics</u>. Indiana: Social Science Education Consortium, 1966.
- Senesh, L., Feigl, H., and Scriven, M. Concluding comments. In I.

 Morrissett. Concepts and structure in the new social science
 curricula. New York: Holt, Rinehart and Winston, 1967, 147 151.
- Sherif, M., and Sherif, C. <u>Interdisciplinary relationships in the social</u> sciences. Chicago: Aldine, 1969.
- Singer, J. D. The relevance of the behavioral sciences to the study of international relations. <u>Behavioral Science</u>, October, 1961, 6, 324 325.
- Skeel, D. The challenge of teaching social studies in the elementary school. Pacific Palisades, California: Goodyear, 1970.
- Sowards, G. W., and Scobey, M. M. The changing curriculum and the elementary teacher. Belmont, California: Wadsworth, 1969.
- Spindler, G. D. New trends and applications in anthropology. In R. A. Price (Ed.). New viewpoints in the social sciences. Washington, D. C.: National Council for the Social Studies, 1958, 115 143.
- Spindler, G. D. Anthropology in the social studies curriculum. In J. Jarolimek, and H. Walsh. Readings for social studies in elementary education. London: Collier-MacMillan, 1965, 129 132.
- Stavrianos, L. S. A global persepctive in the organization of world history. In S. Engle (Ed.) New perspectives in world history. (Thirty-fourth yearbook) Washington, D. C.: National Council for the Social Studies, 1964, 616 620.
- Stratemeyer, F. B., and others. <u>Developing a curriculum for modern living</u>. New York: Columbia University Press, 1957.



- Sykes, G. M. Sociology. In American Council of Learned Societies and the National Council for the Social Studies. The social studies and the social sciences. New York: Harcourt, Brace and World, 1962, 156 170.
- Taba, H. <u>Curriculum development</u>, theory and practice. New York: Harcourt, Brace and World, 1962.
- Taba, H. <u>Teacher's handbook for elementary social studies</u>. Reading, Mass.: Addison-Wesley, 1967.
- Tagliacozzo, G. The literature of integrated knowledge. The American Behavioral Scientist. June, 1961, 4, 3 12
- Tank, M. L. Teaching concepts, generalizations, and constructs. In D. McC. Fraser (Ed.). Social studies curriculum development:

 Prospects and problems.(Thirty-ninth yearbook) Washington, D. C.: National Council for the Social Studies, 1969, 99 139.
- Toynbee, A. Change and habit: The challenge of our time. London: Oxford University Press, 1966.
- The Ontario Institute for Studies in Education. What culture? What heritage? Toronto: Author, 1968.
- Tucker, J. L. An exploratory classification and analysis of selected problem areas within the "new" social studies. Unpublished doctoral dissertation, Indiana University, 1968.
 - Turner, G. B. Foreword. In American Council of Learned Societies and the National Council for the Social Studies. The social studies and the social sciences. New York: Harcourt, Brace and World, 1962, v x.
 - Tyler, R. <u>Basic principles of curriculum and instruction</u>. Chicago: University of Chicago Press, 1950.
 - Tyler, R. The curriculum Then and now. In R. E. Chasnoff, <u>Elementary</u> curriculum, a book of readings. New York: Pitman, 1964, 95 109.
- Waetsen, W. B. (Ed.) Human variability and learning: Papers and reports from the fifth curriculum research institute.

 Washington, D. C.: Association for supervision and curriculum development, 1961.
- Wallas, G. The great society. New York: MacMillan, 1914.
- Washburne, N. E. (Ed.). <u>Decisions, values and groups</u>. London: Pergamon Press, 1962.



- Wax, M. L. Myth and interrelationship in social science: Illustrated through anthropology and sociology. In M. Sherif, and C. Sherif, Interdisciplinary relationships in the social sciences. Chicago: Aldine, 1969, 77 99.
- Webster's new world dictionary of the American language (College Ed.).
 Toronto: Nelson, Foster and Scott, 1966.
- Wilson, E. C. The social study: An investigation of a problem. Elements, April, 1970, 1, 1 2.
- Wise, G. Integrative education for a dis-integrated world. <u>Teachers</u> College Record, March, 1966, 67, 391 401.
- Womack, J. G. <u>Discovering the structure of social studies</u>. New York: Benziger Brothers, 1966.
- Zetterberg, H. L. <u>Sociology in the United States</u>. Paris: Unesco, 1956.









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